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F. Chant, Parkstone.

ALFRED RUSSEL WALLACE

O.M., LL.D., D.C.L., F.R.S.

Wiltthampton XXXX

Knowlton XXX

Wren from King Barrow, Wareham 11

PROCEEDINGS

OF THE

DORSET NATURAL HISTORY

AND

ANTIQUARIAN FIELD CLUB.

EDITED BY

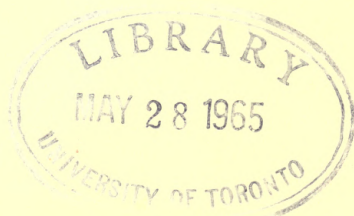
HENRY SYMONDS.

VOLUME XXXV.

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The Dorset Natural History and Antiquarian Field Club.

INAUGURATED MARCH 26TH, 1875.

Presidents :

- 1875-1902—J. C. Mansel-Pleydell, Esq., B.A., F.G.S., F.L.S.
 1902-1904—The Lord Eustace Cecil, F.R.G.S.
 1904 * Nelson M. Richardson, Esq., B.A.

Vice-Presidents :

- 1875-1882—The Rev. H. H. Wood, M.A., F.G.S.
 1875-1884—Professor James Buckman, F.S.A., F.G.S., F.L.S.
 1880-1900—The Rev. Canon Sir Talbot Baker, Bart., M.A.
 1880-1900—General Pitt-Rivers, F.R.S.
 1880 * The Rev. O. Pickard-Cambridge, M.A., F.R.S., F.Z.S.
 1885 * The Earl of Moray, M.A., F.S.A. Scot., F.G.S.
 1892-1904—Nelson M. Richardson, Esq., B.A.
 1900-1902 { * The Lord Eustace Cecil, F.R.G.S.
 1904 }
 1900-1909—W. H. Hudleston, Esq., M.A., F.R.S., F.G.S., F.L.S., *Past Pres. Geol. Society.*
 1900-1904—Vaughan Cornish, Esq., D.Sc., F.C.S., F.R.G.S.
 1900 * Captain G. R. Elwes.
 1902 * H. Colley March, Esq., M.D., F.S.A.
 1904 * The Rev. Herbert Pentin, M.A.
 1904 * The Rev. W. Miles Barnes, B.A.
 1904 * The Rev. Canon J. C. M. Mansel-Pleydell, M.A., R.D.
 1904-1908—R. Bosworth Smith, Esq., M.A.
 1908-1909—Henry Storks Eaton, Esq., M.A., *Past Pres. Roy. Met. Society.*
 1909 * The Rev. Canon C. H. Mayo, M.A., *Dorset Editor of "Somerset and Dorset Notes and Queries."*
 1909 * E. R. Sykes, Esq., B.A., F.Z.S., *Past Pres. Malacological Society.*
 1911-1912—The Rev. C. W. H. Dicker, R.D.
 1912 * Alfred Pope, Esq., F.S.A.
 1913 * Henry Symonds, Esq., F.S.A.
 1913 * His Honour J. S. Udal, F.S.A.

Hon. Secretaries :

- 1875-1884—Professor James Buckman, F.S.A., F.G.S., F.L.S.
 1885-1892—The Earl of Moray, M.A., F.S.A. Scot., F.G.S.
 1892-1902—Nelson M. Richardson, Esq., B.A.
 1902-1904—H. Colley March, Esq., M.D., F.S.A.
 1904 * The Rev. Herbert Pentin, M.A.

Hon. Treasurers :

- 1875-1882—The Rev. H. H. Wood, M.A., F.G.S.
 1882-1900—The Rev. O. Pickard-Cambridge, M.A., F.R.S., F.Z.S.
 1901-1910—Captain G. R. Elwes.
 1910 * The Rev. Canon J. C. M. Mansel-Pleydell, M.A., R.D.

Hon. Editors :

- 1875-1884—Professor James Buckman, F.S.A., F.G.S., F.L.S.
 1885-1892—The Earl of Moray, M.A., F.S.A. Scot., F.G.S.
 1892-1901—Nelson M. Richardson, Esq., B.A.
 1901-1906—The Rev. W. Miles Barnes, B.A.
 1906-1909—The Rev. Herbert Pentin, M.A.
 1909-1912—The Rev. C. W. H. Dicker, R.D.
 1912 * Henry Symonds, Esq., F.S.A.

* The asterisk indicates the present officials of the Club.

RULES

OF

THE DORSET NATURAL HISTORY AND ANTIQUARIAN FIELD CLUB.

OBJECT AND CONSTITUTION.

1.—The Club shall be called The Dorset Natural History and Antiquarian Field Club, and shall have for a short title The Dorset Field Club.

The object of the Club is to promote and encourage an interest in the study of the Physical Sciences and Archæology generally, especially the Natural History of the County of Dorset and its Antiquities, Prehistoric records, and Ethnology. It shall use its influence to prevent, as far as possible, the extirpation of rare plants and animals, and to promote the preservation of the Antiquities of the County.

2.—The Club shall consist of (i.) three Officers, President, Honorary Secretary, and Honorary Treasurer, who shall be elected annually, and shall form the Executive body for its management; (ii.) Vice-Presidents, of whom the Honorary Secretary and Treasurer shall be two, *ex officio*; (iii.) The Honorary Editor of the Annual Volume of Proceedings; (iv.) Ordinary Members; (v.) Honorary Members. The President, Vice-Presidents, and Editor shall form a Council to decide questions referred to them by the Executive and to elect Honorary Members. The Editor shall be nominated by one of the incoming Executive and elected at the Annual Meeting.

There may also be one or more Honorary Assistant Secretaries, who shall be nominated by the Honorary Secretary, seconded by the President or Treasurer, and elected by the Members at the Annual Meeting.

Members may be appointed by the remaining Officers to fill interim vacancies in the Executive Body until the following Annual Meeting.

The number of the Club shall be limited to 400, power being reserved to the Council to select from the list of candidates persons, whose membership they may consider to be advantageous to the interests of the Club, to be additional Members.

PRESIDENT AND VICE-PRESIDENTS.

3.—The President shall take the chair at all Meetings, and have an original and a casting vote on all questions before the Meeting. In addition to the two *ex-officio* Vice-Presidents, at least three others shall be nominated by the President, or, in his absence, by the Chairman, and elected at the Annual Meeting.

HON. SECRETARY.

4.—The Secretary shall perform all the usual secretarial work; cause a programme of each Meeting to be sent to every Member seven days at least before such Meeting; make all preparations for carrying out Meetings and, with or without the help of a paid Assistant Secretary or others, conduct all Field Meetings. On any question arising between the Secretary (or Acting Secretary) and a Member at a Field Meeting, the decision of the Secretary shall be final.

The Secretary shall receive from each Member his or her share of the day's expenses, and thereout defray all incidental costs and charges of the Meeting, rendering an account of the same before the Annual Meeting to the Treasurer; any surplus of such collection shall form part of the General Fund, and any deficit be defrayed out of that Fund.

HON. TREASURER.

5.—The Treasurer shall keep an account of Subscriptions and all other moneys of the Club received and of all Disbursements, rendering at the Annual General Meeting a balance sheet of the same, as well as a general statement of the Club's finances. He shall send copies of the Annual Volume of Proceedings for each year to Ordinary Members who have paid their subscriptions for that year (as nearly as may be possible, in the order of such payment), to Honorary Members, and to such Societies and individuals as the Club may, from time to time, appoint to receive them. He shall also furnish a list at each Annual Meeting, containing the names of all Members in arrear, with the amount of their indebtedness to the Club. He shall also give notice of their election to all New Members.

ORDINARY MEMBERS.

6.—Ordinary Members are entitled to be present and take part in the Club's proceedings at all Meetings, and to receive the published "Proceedings" of the Club, when issued, for the year for which their subscription has been paid.

7.—Every candidate for admission shall be nominated in writing by one Member and seconded by another, to both of whom he must be personally known. He may be proposed at any Meeting, and his name shall appear in the programme of the first following Meeting at which a Ballot is held, when he shall be elected by ballot, one black ball in six to exclude. Twelve Members shall form a quorum for the purpose of election. A Ballot shall be held at the Annual and Winter Meetings, and may be held at any other Meeting, should the Executive so decide, notice being given in the programme. In the event of the number of vacancies being less than the number of candidates at four successive Meetings, the names of any candidates proposed at the first of such Meetings who have not been elected at one of them shall be withdrawn, and shall not be eligible to be again proposed for election for at least a year after such withdrawal. Provided that if at any Meeting there shall be no vacancies available, it shall not be counted in estimating the above named four Meetings.

8.—The Annual Subscription shall be 10s., which shall become due and payable in advance on the 1st of January in each year. Subscriptions paid on election after September in each year shall be considered as subscriptions for the following year, unless otherwise agreed upon by such Member and the Treasurer. Every Member shall pay immediately after his election the sum of ten shillings as Entrance Fee, in addition to his first Annual Subscription.

9.—No person elected a Member shall be entitled to exercise any privilege as such until he has paid his Entrance Fee and first Subscription, and no Member shall be entitled to receive a copy of the "Proceedings" for any year until his Subscription for that year has been paid.

10.—A registered letter shall be sent by the Hon. Treasurer to any Member whose Subscription is in arrear at the date of any Annual Meeting, demanding payment within 28 days, failing which he shall cease to be a Member of the Club, but shall, nevertheless, be liable for the arrears then due.

11.—Members desiring to leave the Club shall give notice of the same in writing to the Treasurer (or Secretary), but, unless such notice is given before the end of January in any year, they shall be liable to pay the Annual Subscription due to the Club on and after January 1st in that year.

HONORARY MEMBERS.

12.—Honorary Members shall consist of persons eminent for scientific or natural history attainments, and shall be elected by the Council. They pay no subscription, and have all the privileges of Ordinary Members, except voting.

MEETINGS.

13.—The Annual General Meeting shall be held as near the first week in May as may be convenient; to receive the outgoing President's Address (if any) and the Treasurer's financial report; to elect the Officers and Editor for the ensuing year; to determine the number (which shall usually be three or four), dates, and places of Field Meetings during the ensuing summer, and for general purposes.

14.—Two Winter Meetings shall usually be held in or about the months of December and February for the exhibition of Objects of Interest (to which not more than one hour of the time before the reading of the Papers shall be devoted), for the reading and discussion of Papers, and for general purposes.

The Dates and Places of the Winter and Annual Meetings shall be decided by the Executive.

15.—A Member may bring Friends to the Meetings subject to the following restrictions:—No person (except the husband, wife, or child of a Member), may attend the Meeting unaccompanied by the Member introducing him, unless such Member be prevented from attending by illness, and no Member may take with him to a *Field Meeting* more than one Friend, whose name and address must be submitted to the Hon. Secretary and approved by him or the Executive.

The above restrictions do not apply to the Executive or to the Acting Secretary at the Meeting.

16.—Members must give due notice (with prepayment of expenses) to the Hon. Secretary of their intention to be present, with or without a Friend, at any Field Meeting, in return for which the Secretary shall send to the Member a card of admission to the Meeting, to be produced when required. Any Member who, having given such notice, fails to attend, will be liable only for any expenses actually incurred on his account, and any balance will be returned to him on application. The sum of 1s., or such other amount as the Hon. Secretary may consider necessary, shall be charged to each person attending a Field Meeting, for Incidental Expenses.

17.—The Executive may at any time call a Special General Meeting of the Members upon their own initiative or upon a written requisition (signed by Eight Members) being sent to the Honorary Secretary. Any proposition to be submitted shall be stated in the Notice, which shall be sent to each Member of the Club not later than seven days before the Meeting.

PAPERS.

18.—Notice shall be given to the Secretary, a convenient time before each Meeting, of any motion to be made or any Paper or communication desired to be read, with its title and a short sketch of its scope or contents. The insertion of these in the Programme is subject to the consent of the Executive.

19.—The Publications of the Club shall be in the hands of the Executive, who shall appoint annually Three or more Ordinary Members to form with them and the Editor a Publication Committee for the purpose of deciding upon the contents of the Annual Volume. These contents shall consist of original papers and communications written for the Club, and either read, or accepted as read, at a General Meeting; also of the Secretary's Reports of Meetings, the Treasurer's Financial Statement and Balance Sheet, a list to date of all Members of the Club, and of those elected in the current or previous year, with the names of their proposers and seconders. The Annual Volume shall be edited by the Editor subject to the direction of the Publication Committee.

20.—Twenty-five copies of his paper shall be presented to each author whose communication shall appear in the volume as a separate article, on notice being given by him to the Publisher to that effect.

THE AFFILIATION OF SOCIETIES AND LIBRARIES TO THE CLUB.

21.—Any Natural History or Antiquarian Society in the County may be affiliated to the Dorset Field Club on payment of an annual fee of Ten Shillings, in return for which the annual volume of the Proceedings of the Field Club shall be sent to such Society.

Every affiliated Society shall send the programme of its Meetings to the Hon. Secretary of the Field Club, and shall also report any discoveries of exceptional interest. And the Field Club shall send its programme to the Hon. Secretary of each affiliated Society.

X.

The Members of the Field Club shall not be eligible, *ipso facto*, to attend any Meetings of affiliated Societies, and the Members of any affiliated Society shall not be eligible, *ipso facto*, to attend any Meetings of the Field Club. But any Member of an affiliated Society shall be eligible to read a paper or make an exhibit at the Winter Meetings of the Field Club at Dorchester.

Any Public Library, or Club or School or College Library, in England or elsewhere, may be affiliated to the Dorset Field Club on payment of an annual fee of Ten Shillings, in return for which the annual volume of the Proceedings of the Field Club shall be sent to such Library.

SECTIONAL COMMITTEES.

22.—Small Committees may be appointed at the Annual General Meeting to report to the Club any interesting facts or discoveries relating to the various sections which they represent ; and the Committee of each section may elect one of their Members as a Corresponding Secretary.

NEW RULES.

23.—No alteration in or addition to these Rules shall be made except with the consent of a majority of three-fourths of the Members present at the Annual General Meeting, full notice of the proposed alteration or addition having been given both in the current Programme and in that of the previous Meeting.



The Dorset Natural History and Antiquarian Field Club.

INAUGURATED MARCH 26th, 1875.

President :

NELSON M. RICHARDSON, Esq., B.A.

Vice-Presidents :

THE LORD EUSTACE CECIL, F.R.G.S. (*Past President*).

THE REV. HERBERT PENTIN, M.A. (*Hon. Secretary*).

THE REV. CANON MANSEL-PLEYDELL, M.A., R.D. (*Hon. Treasurer*).

HENRY SYMONDS, Esq., F.S.A. (*Hon. Editor*).

CAPTAIN G. R. ELWES, J.P.

H. COLLEY MARCH, Esq., M.D., F.S.A.

THE REV. CANON MAYO, M.A. (*Dorset Editor of "Somerset and Dorset Notes and Queries"*).

THE REV. W. MILES BARNES, B.A.

THE EARL OF MORAY, M.A., F.S.A. Scot., F.G.S.

THE REV. O. PICKARD-CAMBRIDGE, M.A., F.R.S., F.Z.S.

ALFRED POPE, Esq., F.S.A.

E. R. SYKES, Esq., B.A., F.Z.S. (*Past Pres. Malacological Society*).

HIS HONOUR J. S. UDAL, F.S.A.

Executive Body :

NELSON M. RICHARDSON, Esq., B.A. (*President*).

The Rev. HERBERT PENTIN, M.A. (*Hon. Secretary*), St. Peter's Vicarage, Portland.

The Rev. Canon MANSEL-PLEYDELL, M.A. (*Hon. Treasurer*), Sturminster
Newton Vicarage, Dorset.

Hon. Editor :

HENRY SYMONDS, Esq., F.S.A., 30, Bolton Gardens, London, S.W.

Publication Committee :

The EXECUTIVE, The HON. EDITOR, H. B. MIDDLETON, Esq.,
Dr. COLLEY MARCH, and E. R. SYKES, Esq.

Sectional Committees :

Dorset Photographic Survey—The MEMBERS of the EXECUTIVE BODY *ex officio*, Captain JOHN ACLAND, M.A., F.S.A., the Rev. W. MILES BARNES, B.A., C. J. CORNISH BROWNE, Esq., Mrs. W. D. DICKSON, the Rev. S. E. V. FILLEUL, M.A., the Rev. C. H. FYNES-CLINTON, M.A., Dr. E. K. LE FLEMING, C. H. MATE, Esq., A. D. MOULLIN, Esq., Miss HILDA POPE, the Rev. J. RIDLEY.

Earthworks—Dr. H. COLLEY MARCH, F.S.A. (Chairman), CHAS. S. PRIDEAUX Esq. (Corresponding Secretary), The PRESIDENT, J. G. N. CLIFT, Esq., the Rev. W. O. COCKRAFT, B.A., H. LE JEUNE, Esq., Lieut.-Colonel F. G. L. MAINWARING, VERE OLIVER, Esq., ALFRED POPE, Esq., F.S.A., W. DE C. PRIDEAUX, Esq., F.S.A., T. H. R. WINWOOD, Esq., M.A.

Numismatic—H. SYMONDS, Esq., F.S.A. (Corresponding Secretary), Captain JOHN E. ACLAND, M.A., F.S.A., Lieut.-Colonel F. G. L. MAINWARING, Canon J. C. M. MANSEL-PLEYDELL, M.A., R.D., W. DE C. PRIDEAUX, Esq., F.S.A., H. F. RAYMOND, Esq.

Restored Churches—The Rev. A. C. ALMACK, M.A., H. W. CRICKMAY, Esq., the Rev. JAMES CROSS, M.A., the Rev. Canon FLETCHER, M.A., R.D., R. HINE, Esq., the Rev. Canon MAYO, M.A., W. B. WILDMAN, Esq., M.A.

Honorary Members :

O.M. W. CARRUTHERS, Esq., Ph.D., F.R.S., F.G.S., F.L.S., British Museum (Nat. Hist.), South Kensington.

1888 The Rev. OSMOND FISHER, M.A., F.G.S., Graveley, Huntingdon.

1889 A. M. WALLIS, Esq., 29, Mallams, Portland.

1900 A. J. JUKES-BROWNE, Esq., B.A., F.R.S., F.G.S., Westleigh, Ash-Hill Road, Torquay.

1900 R. LYDEKKER, Esq., B.A., F.R.S., F.G.S., F.Z.S., The Lodge, Harpenden, Herts.

1900 CLEMENT REID, Esq., F.R.S., F.L.S., F.G.S., One Acre, Milford-on-Sea, Hants.

1900 A. SMITH WOODWARD, Esq., LL.D., F.R.S., F.G.S., British Museum (Nat. Hist.), South Kensington, London.

1904 Sir WM. THISELTON DYER, K.C.M.G., C.I.E., LL.D., Sc.D., Ph.D., F.R.S., The Ferns, Witcombe, Gloucester.

1904 Sir FREDERICK TREVES, Bart., G.C.V.O., C.B., LL.D., Thatched House Lodge, Richmond Park, Kingston-on-Thames.

1908 THOMAS HARDY, Esq., O.M., D. Litt., LL.D., Max Gate, Dorchester.

List of Members

OF THE

Dorset Natural History and Antiquarian Field Club.

Year of

Election. (The initials "O.M." signify "Original Member.")

1903	The Most Hon. the Marquis of Salisbury, M.A., C.B.	The Manor House, Cranborne
1911	The Right Hon. Gertrude, Countess of Moray	Westfield, Wimborne
O.M.	The Right Hon. the Earl of Moray, M.A., F.S.A. Scot., F.G.S. (<i>Vice-President</i>)	Kinfauns Castle, Perth, N.B.
1911	The Right Hon. the Earl of Ilchester	Melbury, Dorchester
1902	The Right Hon. the Earl of Shaftesbury, K.C.V.O.	St. Giles, Wimborne
1884	The Right Hon. Lord Eustace Cecil, F.R.G.S. (<i>Vice-President</i>)	Lytchett Heath, Poole
1903	The Right Hon. Lady Eustace Cecil	Lytchett Heath, Poole
1904	The Right Rev. the Lord Bishop of Durham, D.D.	Auckland Castle, Bishop's Auckland
1892	The Right Rev. the Lord Bishop of Worcester, D.D., F.S.A.	Hartlebury Castle, Kidderminster
1912	The Right Rev. the Lord Bishop of Salisbury, D.D.	The Palace, Salisbury
1889	The Right Hon. Lord Digby	Minterne, Dorchester
1903	The Right Hon. Lord Chelmsford	18, Queen's Gate Place, London, S.W.
1907	The Right Hon. Lord Wynford	Warmwell House, Dorchester
1907	The Right Hon. Lady Wynford	Warmwell House, Dorchester
1910	Abbott, F. E., Esq.	Shortwood, Christchurch, Hants
1914	Acheson-Gray, Mrs.	East Hill, Charminster
1893	Acland, Captain John E., M.A., F.S.A.	Wollaston House, Dorchester
1892	Acton, Rev. Edward, B.A.	Iwerne Minster Vicarage, Blandford
1899	Aldridge, Mrs. Selina	Denewood, Alum Chine Road, Bournemouth
1912	Alexander, Miss Constance	The Grange, Chetnole, Sherborne
1907	Allner, Mrs. George	National Provincial Bank, Sturminster Newton

1908	Almack, Rev. A. C., M.A.	The Rectory, Blandford St. Mary
1906	Atkins, F. T., Esq., M.R.C.S., L.R.C.P. Edin.	Cathay, Alumhurst Road, Bournemouth
1907	Atkinson, George T., Esq., M.A.	Durlston Court, Swanage
1902	Baker, Sir Randolph L., Bart., M.P.	Ranston, Blandford
1912	Baker, Rev. E. W., B.A.	The Rectory, Witchampton
1887	Bankes, Rev. Canon, M.A.	The Close, Salisbury
1906	Bankes, Mrs.	Kingston Lacy, Wimborne
1912	Bankes, Jerome N., Esq., F.S.A.	63, Redcliffe Gardens, London, S.W.
1902	Barkworth, Edmund, Esq.	South House, Pydeltrentthide
1904	Barlow, Major C. M.	Southcot, Charminster
1894	Barnes, Mrs. John Iles	Blandford
1889	Barnes, Rev. W. M., B.A. (<i>Vice- President</i>)	Weymouth Avenue, Dorchester
1903	Barnes, Mrs. F. J.	Glenthorn, Weymouth
1884	Barrett, W. Bowles, Esq.	2, Belfield Terrace, Weymouth
1906	Barrow, Richard, Esq.	Sorrento House, Sandecotes, Parkstone
1895	Bartelot, Rev. R. Grosvenor, M.A.	Fordington St. George Vicarage, Dorchester
1893	Baskett, S. R., Esq.	Evershot
1904	Baskett, Mrs. S. R.	Evershot
1913	Bassett, Rev. H. H. Tilney, R.D.	Whitchurch Vicarage, Blandford
1909	Batten, Colonel J. Mount, C.B. Lord-Lieutenant of Dorset	Up-Cerne House, Dorchester, and Mornington Lodge, West Kensington
1910	Baxter, Lieut.-Colonel W. H.	The Wilderness, Sherborne
1910	Baxter, Mrs. W. H.	The Wilderness, Sherborne
1888	Beckford, F. J., Esq.	Witley, Parkstone
1908	Benett-Stanford, Major J., F.R.G.S., F.Z.S.	Hatch House, Tisbury, Wilts
1910	Blackett, Rev. J. C., B.A.	Keys, Stour Road, Christchurch
1912	Blackett, C. H., Esq.	Rasapenna, McKinley Road, Bourne- mouth
1912	Blackett, W. E., Esq.	Blanchland, McKinley Road, Bourne- mouth
1910	Blomefield, Commander T. C. A., R.N.	9, Bincleaves Road, Weymouth
1903	Bond, Gerald Denis, Esq.	Holme, Wareham
1906	Bond, Nigel de M., Esq., M.A.	8, Evelyn Gardens, London, S.W.
1903	Bond, Wm. Ralph G., Esq.	Tyneham, Wareham
1910	Bond, F. Bligh, Esq., F.R.I.B.A.	The Guild House, Glastonbury
1913	Bone, Clement G., Esq., M.A.	6, Lennox Street, Weymouth
1894	Bonsor, Geo., Esq.	El Castillo, Mairena del Alcor, Sevilla, Spain

1889	Bower, H. Syndercombe, Esq.	Fontnell Parva, Shillingstone, Blandford
1900	Bower, Rev. Charles H. S., M.A.	Childe Okeford Rectory, Shillingstone, Dorset
1898	Brandreth, Rev. F. W., M.A.	Buckland Newton, Dorchester
1901	Brennand, John, Esq.	Belmont, Parkstone
1900	Brown, Miss	Belle Vue, Shaftesbury
1895	Brymer, Rev. J. G., M.A.	Ilington House, Puddletown
1907	Bulfin, Ignatius, Esq., B.A.	The Den, Knole Hill, Bournemouth
1900	Bullen, Colonel John Bullen Symes	Catherston Leweston, near Charmouth
1914	Burton, Miss	Blake Hill House, Parkstone
1907	Bury, Mrs. Henry	Mayfield House, Farnham, Surrey
1905	Busk, W. G., Esq.	Wraxall Manor, Cattistock, Dorchester
1905	Busk, Mrs. W. G.	Wraxall Manor, Cattistock, Dorchester
1901	Bussell, Miss Katherine	Thorneloe School, Rodwell, Weymouth
1903	Butler-Bowden, Mrs. Bruno	Upwey House, Upwey
1911	Butlin, M. C., Esq., M.A.	7, Westerhall Road, Weymouth
1891	Carter, William, Esq.	The Hermitage, Parkstone
1905	Chadwyck-Healey, Sir C. E. H., M.A., K.C., K.C.B., F.S.A.	Wyphurst, Cranleigh, Surrey
1903	Champ, A., Esq.	St. Katherine's, Bridport
1913	Champ, Miss Edith	St. Katherine's, Bridport
1913	Champ, Miss Eva M.	Coniston, Bridport
1897	Chudleigh, Mrs.	Downshay Manor, Langton Matravers, Dorset
1894	Church, Colonel Arthur	St. Alban's, Rodwell, Weymouth
1904	Clapcott, Miss	The Cottage, Bradford Peverell, Dorchester
1892	Clarence, Lovell Burchett, Esq.	Coaxden, Axminster
1905	Clark, Mrs. E. S.	St. Aldhelm's, Wareham
1895	Clarke, R. Stanley, Esq.	Trobridge House, Crediton, Devon
1912	Clift, J. G. Neilson, Esq.	8, Prince's Street, Westminster, S.W.
1883	Colfox, Miss A. L.	Westmead, Bridport
1878	Colfox, Colonel T. A.	Coneygar, Bridport
1905	Collins, Sir Stephen, M.P.	Elm House, Tring, Hertfordshire
1904	Collins, Wm. W., Esq., R.I.	Stoborough Croft, Wareham
1905	Colville, H. K., Esq.	Loders Court, Bridport
1904	Coney, Major Wm. Bicknell	Hillside, Kingston, near Taunton
1912	Cooke, Rev. J. H., M.A., LL.D.	Shillingstone Rectory
1902	Cornish, Rev. W. F., M.A.	Steepleton Rectory, Dorchester
1903	Cornish-Browne, C. J., Esq.	Coryton Park, Axminster

- 1891 Cother, Rev. P. L., M.A. 1, Clearmount, Weymouth
- 1886 Crespi, A. J. H., Esq., B.A.,
M.R.C.P. Cooma, Poole Road, Wimborne
- 1909 Crickmay, Harry W., Esq. Maybury, 12, Greenhill Terrace,
Weymouth
- 1884 Cross, Rev. James, M.A. Baillie House, Sturminster Marshall,
Wimborne
- 1914 Cross, Miss Florence Stock Gaylard Rectory, Sturminster
Newton
- 1885 Curme, Decimus, Esq., M.R.C.S. Eversley, Durley Road, Bournemouth
- 1896 Curtis, C. H., Esq. Blandford
- 1897 Curtis, Wilfrid Parkinson, Esq.,
F.E.S. Aysgarth, Longfleet, Poole
- 1903 Dacombe, J. M. J., Esq. 27, Holdenhurst Road, Bournemouth
- 1912 Dammers, B. F. H., Esq. Harbour House, Bridport
- 1907 Daniell, G. H. S., Esq., M.B. Dale House, Blandford
- 1907 Daniell, Miss Margaret Dale House, Blandford
- O.M.** Darell, D., Esq., F.G.S., F.L.S.,
F.Z.S. Hillfield House, Stoke Fleming, Dart-
mouth, Devon
- 1904 Davies, Rev. Canon S. E., M.A. Wyke Regis Rectory, Weymouth
- 1894 Davis, Geo., Esq. West Lodge, Icen Way, Dorchester
- 1909 Day, Cyril D., Esq., B.A. Glenhurst, Dorchester
- 1904 Deane, Mrs. A. M. Clay Hill House, near Gillingham
- 1910 Devenish, Major J. H. C. Springfield, Weymouth
- 1914 Dibben, H. F., Esq., M.A. Eype, Bridport
- 1907 Dicker, Miss Eleanor H. Brook House, Upwey, Dorchester
- 1912 Dickson, Colonel W. D. Southill, Dean Park, Bournemouth
- 1912 Dickson, Mrs. W. D. Southill, Dean Park, Bournemouth
- 1903 Digby, Major H. Montague 11, Park Lane, Piccadilly, W.
- 1911 Dillon-Trenchard, Miss Margaret The Ridge, Durlston Park Road,
Swanage
- 1906 Dodd, Frank Wm., Esq.,
M.Inst.C.E. 17, Adam Street, Brooklyn, U.S.A.
- 1908 Dodington, H. P. Marriott, Esq. Castle Gardens, Wareham
- 1908 Dominy, G. H., Esq., M.R.C.S.,
L.R.C.P. Milton Abbas, Blandford
- 1912 Dru Drury, G., Esq., M.R.C.S.,
L.R.C.P. Corfe Castle, Wareham
- 1904 Dugdale, J. B., Esq. Sandford, Wareham
- 1905 Duke, Mrs. Henry Manor House, Godmanstone, Dor-
chester
- 1907 Duke, Miss M. Constance The Limes, Dorchester
- 1908 Duke, Mrs. E. Barnaby Maen, Dorchester

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| 1896 Dundas, Ven. Archdeacon, M.A. | Milton Abbey Vicarage, Blandford. |
| 1911 Dymond, Miss Evelyn | Two Leas, Langton Matravers,
Wareham |
| 1914 Eardley, Mrs. H. Edwyn | The Rectory, Swanage |
| 1910 Eaton, Rev. A. E., M.A., F.E.S. | Richmond Villa, Northam, North
Devon |
| 1913 Edwards, Aubrey, Esq. | The Beeches, Pen Hill Avenue, Park-
stone |
| 1913 Ellis, Henry, Esq., F.R.A.S. | Boat Close, Lyme Regis |
| 1885 Elwes, Captain G. R. (<i>Vice-
President</i>) | Bossington, Bournemouth |
| 1913 Facey, C. S., Esq., M.B. | The Elms, Chickerell, near Wey-
mouth |
| 1886 Falkner, C. G., Esq., M.A. | Ireton Bank, Rusholme, Manchester |
| 1884 Farley, Rev. H., M.A. | Overbury Road, Parkstone |
| 1913 Farrar-Roberts, W., Esq. | Plas Lodwig, St. John's Road,
Bournemouth West |
| 1903 Farrer, Colonel Philip | Binnegar Hall, Wareham |
| 1912 Ferguson, Miss E. M. | Elwell Lea, Upwey, Dorchester |
| 1912 Ferguson, Miss Constance | Elwell Lea, Upwey, Dorchester |
| 1904 Ffooks, Mrs. E. Archdall | Kingscote, Dorchester |
| 1904 Fielding, Thos., Esq., M.D. | Milton Abbas, Blandford |
| 1892 Filleul, Rev. S. E. V., M.A. | All Saints' Rectory, Dorchester |
| 1889 Filliter, George Clavell, Esq. | St. Martin's House, Wareham |
| 1896 Filliter, Rev. W. D., M.A. | East Lulworth Vicarage, Wareham |
| 1910 Filliter, Mrs. W. D. | East Lulworth Vicarage, Wareham |
| 1901 Fisher, Mrs. J. F. | Vines Close, Wimborne |
| 1911 Fisher, Rev. J. Martyn, M.A. | St. Paul's Vicarage, Weymouth |
| 1890 Fletcher, W. H. B., Esq. | Aldwick Manor, Bognor, Sussex |
| 1906 Fletcher, Mrs. W. J. | Wyrley, Colehill, Wimborne |
| 1907 Fletcher, Rev. Canon J. M. J.,
M.A., R.D. | The Vicarage, Wimborne Minster |
| 1885 Floyer, G. W., Esq., B.A. | West Stafford, Dorchester |
| 1895 Forbes, Mrs. | Culverhayes, Shillingstone, Blandford |
| 1897 Forde, Henry, Esq. | Luscombe, Parkstone |
| 1910 Forder, B. C., Esq. | Wilderton, Branksome Park, Bourne-
mouth |
| 1893 Forrester, Hugh Carl, Esq., B.A. | St. John's Cottage, Shaftesbury |
| 1893 Forrester, Mrs. James | Westport, Wareham |
| 1910 Fox-Strangways, H. W., Esq. | 2, St. Aubyn's Park, Tiverton, Devon |
| 1911 Fox, H. E. Croker, Esq., M.B.
M.R.C.S., L.R.C.P. | Chalbury Lodge, Weymouth |
| 1910 Freame, Major B. E. | The Chantry, Gillingham |
| 1895 Fry, Edward Alexander, Esq. | 227, Strand, London, W.C. |

1903	Fry, George S., Esq.	Chesham, The Grove, Nether Street, Finchley, London, N.
1913	Gadesden, Mrs. Edmund	Holwell Manor, Sherborne
1896	George, Mrs.	Fleet House, near Weymouth
1908	Galdea, Miss W. P. C.	Upwey Rectory, Dorchester
1890	Glyn, Captain Carr Stuart	Wood Leaze, Wimborne
1912	Glyn, Mrs. Carr	Wood Leaze, Wimborne
O.M.	Glyn, Sir R. G., Bart.	Gaunts House, Wimborne
1895	Godman, F. du Cane, Esq., F.R.S.	Lower Beeding, Horsham
1906	Gowring, Mrs. B. W.	49, High West Street, Dorchester
1908	Greenwood, Arthur, Esq., L.M.S., L.S.A.	32, Dorchester Road, Weymouth
1888	Greves, Hyla, Esq., M.D.	Rodney House, Bournemouth
1904	Groves, Herbert J., Esq.	Clifton, Weymouth
1906	Groves, Miss	Thickthorne, Broadwey, Dorset
1912	Groves, Miss	Blackdown, Weymouth
1912	Groves, Miss M.	Blackdown, Weymouth
1906	Gundry, Joseph, Esq.	Red House, Queen's Avenue, Dor- chester
1896	Haggard, Rev. H. A., M.A.	Molash Vicarage, Canterbury
1912	Haines, F. H., Esq., M.R.C.S., L.R.C.P.	Winfrith, Dorchester
1903	Hambro, Sir Everard, K.C.V.O.	Milton Abbey, Dorset
1905	Hambro, C. Eric, Esq.	Pickhurst Mead, Hayes, Kent
1913	Hamilton, Miss	Affpuddle Vicarage, Dorchester
1893	Hankey, Rev. Canon, M.A., R.D.	Lambert House, Dorchester
1910	Harbin, Rev. E. H. Bates, M.A.	Newton Surmaville, Yeovil
1890	Harrison, Rev. F. T., M.A.	Burton Bradstock Rectory, Bridport
1898	Hassell, Miss	Westfield Lodge, Parkstone
1894	Hawkins, W., Esq., M.R.C.S.	Hillfield, Broadwey, Dorchester
1903	Hawkins, Miss Isabel	Ryme, Elwell Street, Upwey
1908	Hawkins, Rev. H.	1, Westerhall, Weymouth
1893	Hayne, R., Esq.	Fordington House, Dorchester
1889	Head, J. Merrick, Esq., M.R.I.A., F.R.G.S., F.P.S.	Pennsylvania Castle, Portland
1905	Heath, F. R., Esq.	The Woodlands, Weymouth
1911	Hellins, Rev. E. W. J., M.A., LL.B.	Marnhull Rectory, Dorset
1911	Hellins, Mrs. E. W. J.	Marnhull Rectory, Dorset
1899	Henning, Mrs.	Frome, Dorchester
1913	Henshaw, R. Stevenson, Esq., C.E. (<i>Hon. Editor of the Dorset Rainfall Reports</i>)	New Road, Portland

1912	Hichens, Mrs. T. S.	Flamberts, Trent, Sherborne
1901	Hill, R. E., Esq.	Long Lynch, Childe Okeford
1910	Hill, Miss Pearson	Rax, Bridport
1902	Hine, R., Esq.	Beaminster
1902	Homer, Miss E. C. Wood	Bardolf Manor, Puddletown
1907	Homer, Mrs. G. Wood	Bardolf Manor, Puddletown
1888	Huntley, H. E., Esq.	Charlton House, Blandford
1903	Jenkins, Rev. T. Leonard, M.A.	Leigh Vicarage, Sherborne
1912	Jordan, Miss	The Ridge, Durlston Park Road, Swanage
1893	Kerr, E. W., Esq., M.D.	South Walks House, Dorchester
1895	Lafontaine, A. C. de, Esq., F.S.A.	Athelhampton, Dorchester
1902	Langdon, Miss Mary C.	Parrock's Lodge, Chard
1876	Langford, Rev. Canon, M.A.	Southbrook, Starcross, S. Devon
1907	Lees, Captain Edgar, R.N.	White Cross, Wyke Regis
1907	Lees, Mrs. Edgar	White Cross, Wyke Regis
1910	Le Fleming, E. K., Esq., B.A., M.B.	St. Margaret's, Wimborne
1900	Legge, Miss Jane	Allington Villa, Bridport
1899	Le Jeune, H., Esq.	St. Ives, Upper Parkstone, Dorset
1900	Leslie, Rev. E. C., M.A.	Came Rectory, Dorchester
1902	Lewis, Rev. A., M.A.	Chardstock Vicarage, Chard
1894	Linklater, Rev. Prebendary, D.D.	Holworth House, Winfrith
1890	Lister, Miss Gulielma, F.L.S.	High Cliff, Lyme Regis
1905	Llewellyn, W., Esq., M.A.	Upton House, Poole
1900	Lock, Mrs. A. H.	53, High West Street, Dorchester
1892	Lock, His Honour Judge B. Fossett	The Toft, Bridlington, East Yorks
1893	Lock, Miss Mary C.	7, Blackheath Road, Oxford
1911	Long, Rev. H. R., B.A.	Tolpiddle, Dorchester
1910	MacCormick, Rev. F., F.S.A. Scot., M.R.A.S.	Wrockwardine Wood Rectory, Wel- lington, Salop
1888	MacDonald, P. W., Esq., M.D.	Herrison, Dorchester
1902	Mainwaring, Lieut.-Col. F. G. L.	Wabey House, Upwey
1890	Manger, A. T., Esq.	Stock Hill, Gillingham
1907	Mansel, Miss Susan	Top-o'-Town, Dorchester
1899	Mansel-Pleydell, Rev. Canon J. C. M., M.A., R.D. (<i>Vice- President and Hon. Treasurer</i>)	Sturminster Newton Vicarage, Dorset
1896	March, H. Colley, Esq., M.D., F.S.A., M.R.S.A.I., F.A.I. (<i>Vice-President</i>)	Portesham, Dorchester
1883	Marriott, Sir W. Smith, Bart.	The Down House, Blandford

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| 1904 | Marsh, J. L., Esq. | White Cliff Mill Street, Blandford |
| 1911 | Mason, W. J., Esq. | St. Denis, Cann, Shaftesbury |
| 1911 | Mason, Mrs. E. E. | St. Denis, Cann, Shaftesbury |
| 1907 | Mate, C. H., Esq. | Elim, Surrey Road South, Bournemouth |
| 1879 | Maunsell, Rev. F. W., M.A. | Symondsbury Rectory, Bridport |
| O.M. | Mayo, Rev. Canon, M.A., R.D.
(<i>Vice-President</i>) | Gillingham, Dorset |
| 1912 | McDowall, A. S., Esq., M.A. | Norden, Corfe Castle |
| 1907 | Michell, Theo., Esq. | Trewirgie, 37, Christchurch Road, Bournemouth |
| O.M. | Middleton, H. B., Esq., M.A. | Bradford Peverell, Dorchester |
| 1909 | Middleton, Miss A. | Bradford Peverell, Dorchester |
| 1890 | Milne, Rev. Percy H., M.A. | Hornblotton Rectory, Castle Cary |
| O.M. | Moorhead, J., Esq., M.A.,
M.D. | The Imperial Hotel, Bournemouth |
| 1905 | Morgan, Mrs. | The Vicarage, Yetminster |
| 1911 | Morris, Sir Daniel, K.C.M.G.,
D.Sc., D.C.L., F.L.S. | 14, Crabton Close, Boscombe |
| 1914 | Moule, Rev. A. C., B.A. | Little Bredy, Dorchester |
| 1897 | Moullin, Arthur D., Esq. | Fermain, Cranbourne Road, Swanage |
| 1908 | Nettleton, Spencer, Esq. | West Lulworth, Wareham |
| 1909 | Newnham, H. S., Esq. | Rodlands, Dorchester |
| 1905 | Nicholson, Captain Hugh | Nettlecombe, Melpash |
| 1906 | Oke, A. W., Esq., B.A., LL.M.,
F.S.A., F.G.S. | 32, Denmark Villas, Hove, Sussex |
| 1886 | Okeden, Colonel U. E. Parry | Turnworth, Blandford |
| 1906 | Okeden, Edmund Parry, Esq. | Turnworth, Blandford |
| 1908 | Oliver, Vere L., Esq. | Whitmore Lodge, Sunninghill, Berks |
| 1908 | Oliver, Mrs. Vere L. | Whitmore Lodge, Sunninghill, Berks |
| 1904 | Oliver, Weston, Esq., M.A. | Castle House, Weymouth |
| 1908 | Ord, W. T., Esq., M.R.C.S.,
L.R.C.P., F.G.S. | Greenstead, 14, Madeira Road, Bournemouth |
| 1911 | Oules, W. W., Esq., R.A. | 12, Bryanston Square, London, W. |
| 1911 | Oules, Miss Catherine | 12, Bryanston Square, London, W. |
| 1905 | Paget, Miss Adelaide | Park Homer, Wimborne |
| 1914 | Pass, Alfred Douglas, Esq. | Wootton Fitzpaine, Charmouth |
| 1890 | Patey, Miss | 185, Oakwood Court, Kensington, London, W. |
| 1908 | Patterson, Mrs. Myles | Conygar, Broadmayne, Dorchester |
| 1907 | Paul, Edward Clifford, Esq.,
M.A. | Eastbrook House, Upwey |
| 1907 | Paul, Mrs. Edward Clifford | Eastbrook House, Upwey |

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| 1894 | Payne, Miss Florence O. | Rydal, Wimborne |
| 1906 | Pearce, Mrs. Thos. A. | Ivythorpe, Dorchester |
| 1909 | Pearce, Edwin, Esq. | Fore Street, Taunton |
| 1901 | Peck, Gerald R., Esq. | Muston Manor, Puddletown |
| 1878 | Penny, Rev. J., M.A. | Tarrant Rushton Rectory, Blandford |
| 1894 | Penny-Snook, S., Esq., M.R.C.S.,
L.R.C.P. | Netherton House, Weymouth |
| 1907 | Penny-Snook, Mrs. S. | Netherton House, Weymouth |
| 1901 | Pentin, Rev. Herbert, M.A. (<i>Vice-
President and Hon. Secretary</i>) | St. Peter's Vicarage, Portland |
| 1894 | Peto, Sir Henry, Bart. | Chedington Court, Misterton, Somerset |
| 1896 | Phillips, Miss | Walton House, Bournemouth |
| 1908 | Phillips, Rev. C. A., M.A. | Walton House, Bournemouth |
| 1898 | Pickard-Cambridge, A. W., Esq.,
M.A. | St. Catherine's, Headington Hill, Oxford |
| O.M. | Pickard - Cambridge, Rev. O.,
M.A., F.R.S. (<i>Vice-President</i>) | Bloxworth Rectory, Wareham |
| 1908 | Pickard-Cambridge, Miss Ada | Picardy, Rodwell, Weymouth |
| 1908 | Pickard-Cambridge, Miss
Catherine | Picardy, Rodwell, Weymouth |
| 1903 | Pike, Leonard G., Esq. | Kingbarrow, Wareham |
| 1913 | Pinney, Rev. Baldwin, B.A. | Durweston Rectory, Blandford |
| 1913 | Pinney, Mrs. Baldwin | Durweston Rectory, Blandford |
| 1903 | Pitt-Rivers, A. L. Fox, Esq.,
F.S.A. | Rushmore, Salisbury |
| 1913 | Pitt, Mrs. Lionel Fox | Cliff House, Shaftesbury |
| 1904 | Plowman, Rev. L. S. | Ibberton Rectory, Blandford |
| 1896 | Pond, S., Esq. | Blandford |
| 1894 | Ponting, Chas. E., Esq., F.S.A. | Wye House, Marlborough |
| 1908 | Poole, Rev. Sealy, M.A. | Chickerell Rectory, Weymouth |
| O.M. | Pope, Alfred, Esq., F.S.A. (<i>Vice-
President</i>) | South Court, Dorchester |
| 1906 | Pope, Alfred Rolph, Esq., M.A. | Culliford House, Dorchester |
| 1906 | Pope, Mrs. Alfred Rolph | Culliford House, Dorchester |
| 1905 | Pope, Miss Hilda | South Court, Dorchester |
| 1909 | Pope, Francis J., Esq.,
F.R. Hist. S. | 17, Holland Road, London, W. |
| 1909 | Pratt, Colonel, R.A. | The Ferns, Charminster |
| 1896 | Prideaux, C. S., Esq., L.D.S. | Ermington, Dorchester |
| 1900 | Prideaux, W. de C., Esq., L.D.S.,
F.S.A., F.R.S.M. | 12, Frederick Place, Weymouth |
| 1905 | Pringle, Henry T., Esq., M.D. | Ferndown, Wimborne |
| 1905 | Pringle, Mrs. Henry T. | Ferndown, Wimborne |

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| 1888 | Pye, William, Esq. | Dunmore, Rodwell, Weymouth |
| 1905 | Ramsden, Mrs. | The Dower House, Lew Trenchard,
Devon |
| 1912 | Rawlence, E. A., Esq. | Newlands, Salisbury |
| 1886 | Reynolds, Mrs. Arthur | Wynderoft, Bridport |
| 1904 | Rhydderch, Rev. W. | Owermoigne Rectory, Dorchester |
| 1887 | Richardson, N. M., Esq., B.A.
(<i>President</i>) | Montevideo, Chickerell, near Wey-
mouth |
| 1901 | Ridley, Rev. J. | The Rectory, Pulham, Dorchester |
| 1911 | Robson, Colonel H. D. | St. Oswald, West Lulworth |
| 1911 | Robson, Mrs. H. D. | St. Oswald, West Lulworth |
| 1886 | Rodd, Edward Stanhope, Esq. | Chardstock House, Chard |
| 1907 | Roe, Miss M. M. E. | Trent Rectory, Sherborne |
| 1909 | Roe, Rev. Wilfrid T., M.A. | Trent Rectory, Sherborne |
| 1912 | Romilly, Geo., Esq., M.A. | The Grange, Marnhull |
| 1907 | Roper, Freeman, Esq., F.L.S. | Forde Abbey, Chard |
| 1889 | Russell, Colonel C. J., R.E. | Clavinia, Weymouth |
| 1910 | Russell-Wright, Rev. T., M.A. | Mountside, Westbourne Park Road,
Bournemouth |
| 1905 | Sanderson-Wells, T. H., Esq.,
M.D. | 16, Victoria Terrace, Weymouth |
| 1913 | Sauer, Hans, Esq., M.D. | Parnham, Beaminster |
| 1913 | Sauer, Mrs. Hans | Parnham, Beaminster |
| 1905 | Saunt, Miss | The Cottage, Upwey |
| 1905 | Saunt, Miss B. V. | The Cottage, Upwey |
| 1889 | Schuster, Rev. W. P., M.A., R.D. | The Vicarage, West Lulworth, Ware-
ham |
| 1910 | Schuster, Mrs. W. P. | The Vicarage, West Lulworth, Ware-
ham |
| 1907 | Scott, J. H., Esq., M.E. | Skiddaw, Talbot Hill, Bournemouth |
| 1904 | Seaman, Rev. C. E., M.A., R.D. | Stalbridge Rectory, Blandford |
| 1883 | Searle, Alan, Esq. | Ashton Lodge, Bassett, Southampton |
| 1906 | Shephard, Colonel C. S., D.S.O. | Shortlake, Osmington, Weymouth |
| 1896 | Shepherd, Thomas, Esq.,
F.R.M.S. | Kingsley, Bournemouth West |
| 1906 | Shepherd, Rev. F. J. | The Presbytery, Dorchester |
| 1903 | Sheridan, Mrs. A. T. Brinsley | Frampton Court, Dorchester |
| 1884 | Sherren, J. A., Esq., F.R. Hist. S. | Helmsley, Penn Hill Avenue, Park-
stone |
| 1914 | Sherring, R. Vowell, Esq., F.L.S. | Hallatrow, Bristol |
| 1913 | Shields, Rev. A. J., M.A. | Thornford Rectory, Sherborne |
| 1908 | Shortt, Miss E. F. | The Manor House, Martinstown |
| 1908 | Shortt, Miss L. M. | The Manor House, Martinstown |

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| 1897 | Simpson, Jas., Esq. | Minterne Grange, Parkstone |
| 1895 | Simpson, Miss | Penolver, Glendinning Avenue, Weymouth |
| 1912 | Smith, Rev. A. Hippisley | Knowlton House, Surrey Road, Bournemouth |
| 1913 | Smith, Hy. Gregory, Esq. | Crathie Lodge, Parkstone |
| 1899 | Smith, Howard Lyon, Esq.,
L.R.C.P. | St. Mary's Rectory, Glanville's Wootton |
| 1909 | Smith, Nowell C., Esq., M.A. | School House, Sherborne |
| 1908 | Smith, Mrs. Spencer | Kingston Vicarage, Wareham |
| 1888 | Solly, Rev. H. Shaen, M.A. | Southcote, Alexandra Road, Parkstone |
| 1901 | Sotheby, Rev. W. E. H., M.A.,
R.D. | Gillingham Vicarage, Dorset |
| 1905 | Stephens, J. Thompson, Esq. | Wanderwell, Bridport |
| 1908 | Stephens, A. N., Esq. | Haddon House, West Bay, Bridport |
| 1900 | Storer, Colonel, late R.E. | Keavil, Bournemouth |
| 1895 | Sturdy, Leonard, Esq. | Trigon, Wareham |
| 1896 | Sturdy, Philip, Esq. | The Wick, Branksome, near Bournemouth |
| 1907 | Sturdy, Alan, Esq. | The Wick, Branksome, near Bournemouth |
| 1905 | Sturdy, E. T., Esq. | Norburton, Burton Bradstock, Bridport |
| 1914 | Sturrock, J., Esq. | 12, Greenhill, Weymouth |
| 1898 | Sturt, W. Neville, Esq. | 9, Lansdown Crescent, Bath |
| 1898 | Suttill, H. S., Esq. | Pymore, Bridport |
| 1905 | Suttill, John, Esq. | 24, West Street, Bridport |
| 1913 | Swaffield, A. Owen, Esq. | Rodwell Lodge, Weymouth |
| 1912 | Swinburne-Hanham, J. C., Esq. | Manston, Sturminster Newton |
| 1893 | Sykes, E. R., Esq., B.A., F.Z.S.
(<i>Vice-President</i>) | Longthorns, Blandford |
| 1889 | Symes, G. P., Esq., M.A., B.C.L.,
M.V.O. | Monksdene, Dorchester Road, Weymouth |
| 1904 | Symonds, Arthur G., Esq. | 10, South Street, Dorchester |
| 1904 | Symonds, Henry, Esq., F.S.A.
(<i>Vice-President and
Hon. Editor</i>) | 30, Bolton Gardens, London, S.W. |
| 1912 | Symonds, F. G., Esq. | The Firs, Sturminster Newton |
| 1913 | Symonds, Wm. Pope, Esq. | Newton House, Sturminster Newton |
| 1901 | Telfordsmith, Telford, Esq.,
M.A., M.D. | The Knoll, Parkstone |
| O.M. | Thompson, Rev. G., M.A. | Highbury, Bodorgan Road, Bournemouth |

1906	Thomson, Chas. Bertram, Esq., F.R.C.S.	Romansleigh, Wimborne
1907	Towers, Miss	Kelvedon, Cliff Road, Sherringham, Norfolk
1898	Troyte-Bullock, Mrs.	Silton Lodge, Zeals, Bath
1905	Truell, Mrs.	Onslow, Wimborne
O.M.	Udal, His Honour J. S., F.S.A. (<i>Vice-President</i>)	2, Marlborough Hill, London, N.W.
1908	Udal, N. R., Esq., B.A.	Gordon College, Khartoum
1897	Usher, Rev. R., M.A., F.L.S.	Netherbury, Beaminster
1890	Usherwood, Rev. Canon T. E., M.A.	Bagdale, Parkstone
1910	Vivian, S. P., Esq.	22, Royal Avenue, Chelsea, S.W.
1907	Waite, Arthur H., Esq.	Osmington House, Weymouth
1887	Walker, Rev. S. A., M.A.	Charlton Manor, Blandford
1905	Ward, Samuel, Esq.	Ingleton, Greenhill, Weymouth
O.M.	Warre, Rev. Canon F., M.A.	Bemerton, Salisbury
1904	Warry, Mrs. King	39, Filey Avenue, Upper Clapton, London, N.
1904	Warry, Wm., Esq.	Westrow, Holwell, Sherborne
1905	Watkins, Wm., Esq., F.R.G.S.	62, London Wall, E.C.
1905	Watts, Miss	Bemerton, Salisbury
1893	Weaver, Rev. F. W., M.A., F.S.A., F.R.Hist.S.	Milton Vicarage, Evercreech, Somerset
1910	Webb, Miss	Luscombe, Parkstone
1913	West, C. E., Esq.	Cluny Croft, Swanage
1895	Whitby, Joseph, Esq.	Preston, Yeovil
1908	Whitby, Mrs. J.	Preston, Yeovil
1904	Wildman, W. B., Esq., M.A.	The Abbey House, Sherborne
1903	Williams, Captain Berkeley C. W.	Herrington, Dorchester
1897	Williams, Miss F. L.	Westleaze, Dorchester
1884	Williams, Colonel Robert, M.P.	Bridehead, Dorchester
1884	Williams, Mrs. Robert	Bridehead, Dorchester
1908	Williams, Miss Rhoda	Bridehead, Dorchester
1906	Williams, Miss Meta	South Walk, Dorchester
1912	Williams, Mrs. Arthur S.	Hill House, Yetminster
1905	Wills, A. W., Esq., B.A., LL.B.	3, Hyde Park Gate, London, S.W.
1906	Winwood, T. H. R., Esq., M.A.	Rothesay, Dorchester
1910	Woodd, A. B., Esq., M.A., M.R.I.	Heckfield, Milford-on-Sea, Hants
1913	Woodhouse, Rev. A. C.	Winterborne Monkton Rectory, Dor- chester
1913	Woodhouse, Mrs. A. C.	Winterborne Monkton Rectory, Dor- chester
1898	Woodhouse, Miss	Chilmore, Ansty, Dorchester

1903	Woodhouse, Miss Ellen E.	Chilmore, Ansty, Dorchester
1906	Woodhouse, Frank D., Esq.	Old Ford House, Blandford St. Mary
1906	Woodhouse, Mrs. Frank D.	Old Ford House, Blandford St. Mary
1911	Woodhouse, Miss A. M. R.	Norden, Blandford
1902	Wright, Rev. Herbert L., B.A.	Church Knowle Rectory, Corfe Castle
1910	Yeatman, H. F., Esq., M.A., B.C.L.	28, Cecil Court, Hollywood Road, London, S.W.

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The above list includes the New Members elected up to and including the
May meeting of the year 1914.

(Any omissions or errors should be notified to the Hon. Secretary).



New Members

ELECTED SINCE THE PUBLICATION OF THE LIST CONTAINED
IN VOL. XXXIV.

PROPOSED MAY 6TH, 1913.

<i>Nominee.</i>	<i>Proposer.</i>	<i>Seconder.</i>
Miss Edith Champ, of St. Katharine's, Bridport	A. Champ, Esq.	J. Suttill, Esq.
Miss Eva M. Champ, of Conis- ton, Bridport	,,	,,
The Rev. A. J. Shields, M.A., of Thornford Rectory, Sher- borne	Captain Carr S. Glyn	Miss Constance Alexander
Hy. Gregory Smith, Esq., of Crathie Lodge, Parkstone	The Rev. Canon T. E. Usherwood	The Rev. H. Farley
The Rev. A. C. Woodhouse, M.A., of Winterbourne Monk- ton Rectory, Dorchester	H. S. Newnham, Esq.	The Rev. W. Miles Barnes
Mrs. A. C. Woodhouse, of Winter- bourne Monkton Rectory	,,	,,

PROPOSED JUNE 5TH AND JULY 3RD, 1913.

<i>Nominee.</i>	<i>Proposer.</i>	<i>Seconder.</i>
Mrs. Gadesden, of Holwell Manor, Sherborne	Canon J. C. M. Mansel-Pleydell	H. Syndercombe Bower, Esq.
Mrs. Lionel Fox Pitt, of Cliff House, Shaftesbury	,,	The Rev. J. C. Blackett
Aubrey Edwards, Esq., of The Beeches, Penn Hill Avenue, Parkstone	Canon T. E. Usherwood	H. Le Jeune, Esq.

PROPOSED SEPT. 16TH, 1913.

<i>Nominee.</i>	<i>Proposer.</i>	<i>Seconder.</i>
The Rev. H. H. T. Bassett, R.D., of Whitechurch Vicarage, Blandford	Canon J. C. M. Mansel-Pleydell	The Rev. A. C. Almack
Clement G. Bone, Esq., M.A., of 6, Lennox Street, Weymouth	,,	The Rev. W. Rhydderch
Henry Ellis, Esq., F.R.A.S., of Inglefield, Little Heath, Potter's Bar, Middlesex	W. J. Mason, Esq.	The Rev. H. S. Solly
Wm. Pope Symonds, Esq., of Broadview, Kettering	Alfred Pope, Esq.	The Hon. Editor

PROPOSED DEC. 9TH, 1913.

<i>Nominee.</i>	<i>Proposer.</i>	<i>Second.</i>
Miss Burton, of Blake Hill House, Parkstone	The Rev. H. S. Solly	The Rev. S. E. V. Filleul
H. F. Dibben, Esq., M.A., of Eype, Bridport	Sir Daniel Morris	Dr. W. T. Ord
Charles E. Mason, of Stone, Wimborne	Captain Carr S. Glyn	Canon J. M. J. Fletcher
J. Sturrock, Esq., of 12, Greenhill, Weymouth	Miss M. H. Saunt	Miss Simpson

PROPOSED FEB. 3RD, 1914.

<i>Nominee.</i>	<i>Proposer.</i>	<i>Second.</i>
Mrs. Acheson-Gray, of East Hill, Charminster	Miss L. R. Clapcott	H. B. Middleton, Esq.
Miss Florence Cross, of Stock Gaylard Rectory, Sturminster Newton	Canon J. C. M. Mansel-Pleydell	Mrs. Allner
Mrs. Eardley, of the Rectory, Swanage	The Rev. H. L. Wright	The Rev. W. P. Schuster
The Rev. A. C. Moule, B.A., of Little Bredy, Dorchester	Captain J. E. Acland	Colonel Robert Williams
Alfred Douglas Pass, Esq., of Wootton Fitzpaine, Char-mouth	Colonel T. A. Colfox	Joseph Gundry, Esq.
R. Vowell Sherring, Esq., F.L.S., of Hallatrow, Bristol	H. Le Jeune, Esq.	Dr. H. Colley March



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Proceedings of the Dorset Natural History and Antiquarian Field Club. Vols. I.—XXXV. Price 10s. 6d. each volume, post free.

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Devizes.

The Proceedings
OF THE
Dorset Natural History and Antiquarian
Field Club

FROM MAY, 1913, TO MAY, 1914.

FIRST SUMMER MEETING.

THE VALLEY OF THE WIN OR ALLEN.

Thursday, 5th June.

Wimborne railway station was the meeting place of about 120 members and their guests. Among those who attended on this occasion were the President, the Hon. Secretary, the Hon. Treasurer, and the Archdeacon of Dorset. Those of the members who had arrived by earlier trains occupied the interval by making a brief visit to the Minster Church, under the guidance of Canon FLETCHER.

The party then began the programme by driving to the paper mills at Witchampton, where they were received by the owner, Mr. WILLIAM BURT, who conducted them through the manufactory and explained in detail the various processes. Paper making had been carried on continuously in this country parish for about 150 years by seven or eight generations of Mr. Burt's forefathers, and the industry was therefore entitled to rank as one of the oldest in Dorset. It was mentioned that the chief products of the mills were cartridge paper for sporting ammunition and brown packing paper. After the machinery and appliances had been inspected, the PRESIDENT expressed the thanks of the Club to Mr. Burt and his family for their kindness.

WITCHAMPTON :

ITS BARN, MANOR HOUSE, AND CHURCH.

The Members were welcomed to this charming village by the Rev. E. W. BAKER, the Rector, who acted as their guide. The ruins of the so-called Abbey Barn were, by local tradition, part of a monastery ; but Mr. Baker was of opinion that the building was almost certainly the original manor house of the Matravers and Arundel families, who had successively owned the manor from 1300 to 1600. The PRESIDENT recalled the fact that a holy-water stoup had been found in a fallen portion of the wall, but the RECTOR said that his predecessor came to the conclusion that the stoup was from the private oratory of the house. Mr. PENTIN added that there was no evidence of any monastic foundation in the parish.

At the Manor House, which may be dated as not earlier than 1520, the PRESIDENT read a few notes prepared by Miss Williams, who had recently lived there. The dining-room, kitchen, pantry, and another small room, with the chambers over them, were the only surviving portions of the old structure, the other part having been added about 38 years ago. Over a small window are the letters W. R., which stand for William Rolle ; when the house was enlarged a worn stone reading, "Pray for the soule," was removed from between the two letters. (The rector in 1505 was Walter Rolle.) The oak mantelpiece and the panelling are Jacobean ; the latter had been covered with white paint, which was scraped off by Mrs. Williams.

The church of All Saints was rebuilt, with the exception of the Perpendicular tower, by Mr. C. H. Sturt between 1832 and 1845, and was restored in 1898 by the Rev. C. P. Wix, then rector. Mr. BAKER related the history of the church and parish, with which were associated the families of Arundel, Scovel, and Cole. He also drew attention to the monuments formerly in the old church, to the 13th century font of irregular octagon shape, which had at one time been

used as a drinking trough, and to the chalice and paten presented in 1630 by Elizabeth Scovel. Another interesting object was an earthenware flagon, capable of holding some five gallons, and bearing the inscription "Witchampton Bellfrye."

CRICHEL HOUSE.

By the kind invitation of Lord Alington the Club next visited More Crichel. The ancient seat of the Napiers having been destroyed by fire in 1742, the present house was erected in the Classic Renaissance style of that period, and was afterwards enlarged by Humphry Sturt. Many royal visitors have been entertained at Crichel from time to time, King Edward VII. and the German Emperor being among the number. The members were able to examine the architectural features of the interior and the collection of works of art, the latter including a series of portraits by celebrated painters of the 18th century. There was time to walk through the Italian garden and the rock garden, where the botanists found much to attract their attention. The church, which was rebuilt by Mr. C. H. Sturt on the site of an earlier fabric, was also visited.

KNOWLTON.

A pleasant drive brought the party to the derelict chapel of Knowlton, in the parish of Woodlands. The ruins stand upon a plateau surrounded by a circular earthwork, the fosse of which is inside the vallum, as at Avebury. (*Cf.* the plan and description in *Proceedings* Vol. XXXIV., p. 39.)

Mr. OSWALD KNAPP received the Members on their arrival and explained the points of interest. The original chapel was early Norman, of which period two typical arches have survived. The font, also of Norman work, is now preserved in Woodlands Church. The tower, chantry chapel, and the eastern portion of the aisle were of the Decorated period. Hutchins said that the building was in ruins in 1650, and although there had been later attempts at restoration it

had been in its present roofless condition for at least a century.

The day's programme terminated at Wimborne Vicarage, where the Club was most hospitably entertained at tea by Canon and Mrs. Fletcher. Two candidates for membership were afterwards nominated.



SECOND SUMMER MEETING.

*THE NEW FOREST.**Thursday, 3rd July.*

The Field Club assembled at Ringwood Station, the main purpose of the meeting being to examine the Romano-British pottery works in that district.

Mr. Nelson M. Richardson, the President, was accompanied by the Rev. H. Pentin, Canon Mansel-Pleydell, Captain Elwes, Mr. Alfred Pope, and about 85 members and their friends.

Under the guidance of Mr. Heywood Sumner, F.S.A., the party set out for the potteries at Sloden, where the spoil heaps yielded many specimens of broken shards, some of which had been decorated by the craftsmen of the Roman period.

After an inspection of the site, the members drove on through the Forest to the second pottery works at Island's Thorn, where Mr. SUMNER addressed them on the history of the two undertakings, as derived from excavations and similar evidence.

These potteries, at Sloden and Island's Thorn, were Romano-British potteries of a commercial character. Here coarse, hard ware was made and hawked about the country for sale, presumably on pack-horses, judging by the trackways which one saw leading to and from the potteries. There was one good example near God's Hill, called on the Ordnance Map a "supposed camp," but really an old pack-horse way, and the natural road from the Sloden potteries to Cranborne Chase. The potteries had been excavated to a certain extent, but not thoroughly, because the trees had always interfered with any excavators' work. Mr. Bartlett, who made these excavations in 1853, as recorded in *Archæologia*, found kilns with their floors intact, but not their side walls. They had a sort of brick earth remaining round the side walls, but none of them were perfect; and unfortunately the plans which Mr. Bartlett drew of the sites of the kilns were drawn with the compass, and thus did not show how the kilns were made. It was supposed that wood was used as fuel, and that then, as nowadays, the

clay was fetched to the fuel, and not the fuel to the clay. There was abundance of wood in the Forest, and the clay may have come either from the hills around or from Alderholt. The floors of the kilns were made of heath stone—sand indurated with iron. That fact was interesting, because in the course of the excavations which he had made on the site of a Roman farm on Rockbourne Down, where some Roman hypocausts had been found, he observed that the sides of the flues were made entirely of this heath sandstone, which withstood fire and burnt a wine-red. He had written to Mr. Engleheart, of Tisbury, who had excavated at Andover, and asked him whether he had also found this heath-stone used. Mr. Engleheart answered that in all the hypocausts that he had unearthed he had found this heath-stone, burnt a fine wine-colour. This heath-stone was found on all the hills about there, but not at Andover or on the heath itself. Probably it was an article of export, just as this coarse and fine pottery was hawked about the country. At Island's Thorn Mr. Bartlett dug up three Roman coins, dating from 350 to 370 A.D., but the patterns on some of the ornamented pottery had a distinct pre-Roman or late Celtic character, which suggested that these potteries were a going concern before the Romans came, and before they somewhat changed their style of ornamentation. Much of the pottery found on the downs was too soft to be hawked about; but that made at Sloden was quite hard, either black-grey or reddish ware, extremely well made and rather harsh to the touch. Presumably these "spoil banks" were the place where they threw away the unsatisfactorily-made pieces—the *flaschi*. At Sloden the pottery was all of one kind, for homely domestic purposes, but at Island's Thorn there was considerable variety. The principal type was of a rather thick, bone-coloured ware, on which lines and zig-zags were painted in red. Then there was also a very hard grey pottery with a purplish glaze, ornamented with indentations and zig-zags; and again one found a thinner reddish pottery with a glaze apparently meant to imitate Samian—a better-class ware which came from Gaul and which the Romans appreciated very much. The potters in the Forest were not very successful in their imitation of it, and their glaze always wore off.

Before leaving Island's Thorn, Captain Elwes was asked to make a few comments on the *flora* of the neighbourhood. He said that among the rarities was a very scarce wild gladiolus, which was not improbably introduced by the Romans; the plant had disappeared for a time, but during the last twenty years it had been found again. Another rare plant was the ivy-leaved harebell, which occurred among

moss in damp situations. Two varieties of *Drosera*, or sun dew, were found there, as in Purbeck, and occasionally an unusual form of *Orchis maculata*. *Erica ciliaris* did not occur there.

The party then went to Mr. Sumner's house at Cuckoo Hill, South Gorley, where they were welcomed by their host and hostess and entertained at tea. Afterwards, Mr. Sumner invited his guests to examine the original drawings of various archæological excavations, among which were the plans of a Romano-British farmstead at Rockbourne Down recently uncovered by him, and he also exhibited many interesting objects from the same site. Three hypocausts had been found, the arrangement of the flue in the bakehouse being of a very unusual character.

The PRESIDENT then thanked Mr. Sumner for his valuable assistance during the day and for his hospitality at South Gorley.

At a business meeting which followed, a protest was recorded against any alteration of the calendar, including that proposed by the Illinois State Academy of Science. Six candidates were elected by ballot, and one new nomination was announced by the HON. SECRETARY.



THIRD SUMMER MEETING.

*MALMESBURY AND LACOCK.**Thursday and Friday, 14th and 15th August.*

The headquarters of the Club during this meeting were at the Angel Hotel, Chippenham, a central point from which to carry out the programme. The members, having assembled at Malmesbury, placed themselves under the leadership of their friend, Mr. E. Doran Webb, F.S.A., who had again consented to act as guide during the two-days visit to Wiltshire.

On reaching the Benedictine Abbey Church the party was met by the Vicar, Canon McMILLAN, who greeted the visitors with a few words of welcome.

Mr. DORAN WEBB then gave a short account of the history of the town, the name of which was derived, as he thought, from the Celtic and Saxon words "Mal dune beorg," or Cross-hill-town.

The first Abbot of whom anything was definitely known was Aldhelm, who received a grant of lands in A.D. 675 from Eleutherius, Bishop of Sherborne, as stated in the chartulary of Malmesbury. In 705 Aldhelm became Bishop of Sherborne, and was succeeded at Malmesbury by a long line of Abbots, who controlled the church and monastery until the Dissolution.

Turning to the exterior of the Abbey, now the Parish Church, Mr. Webb remarked that this splendid relic of Twelfth Century Romanesque architecture had originally a tower at the Western end and a central tower at the crossing, surmounted by a lofty spire of wood. Both of the towers fell in the sixteenth century, the collapse of the Western one destroying the three nearest bays of the nave. The West screen front was afterwards rebuilt against the shortened church. The portions in use to-day were the six remaining bays of the nave, now walled up at the East end, and the South porch. The Eastern limb, consisting of five bays, and

both of the transepts, have vanished, save two ruined arches of the crossing and part of a transept wall.

The cloisters and monastic buildings stood on the North side, such fragments as have survived being now incorporated with the Abbey House, an Elizabethan dwelling.

The Norman porch on the South side, showing eight orders on the outer arch and three on the inner, is the chief glory of the Abbey. "We have," said Mr. Webb, "no other porch equal to this in the whole country."

The interior of the church retains the Norman vaulting of the nave and aisles, which, with the other early work, enables the stranger to form a conception of the beauty of the structure in its entirety. An altar tomb bearing the recumbent effigy of a king, reputed to be Æthelstan, lies near the South-east corner. This king granted to the townsmen of Malmesbury in A.D. 937 six hundred acres of land in the neighbourhood, and the rights so conferred in Saxon times are enjoyed by some 240 holders of allotments at the present day.

After the Dissolution the Abbey was sold to one Master Stumpe, a clothier, who set up his looms in the monastic offices and even carried on his trade in parts of the church itself. Nevertheless, it is to this Tudor clothier that we mainly owe the preservation of the nave and its conversion to the purposes of a parish church. The library of the monks had contained manuscripts which would now be priceless, but many of them, alas, were dipped in tallow and used by Stumpe's weavers as a means of lighting them to and from their work.

THE TOWN.

The belfry tower is the only surviving portion of the old parish church of St. Paul, which was abandoned when the Abbey was adapted to parochial uses; this tower now serves as a *campanile* for the monastic church.

The octagonal market cross has its stone vaulting intact, and is a fine example of the Perpendicular masonry of the sixteenth century.

The Club also inspected the quaint buildings known as Æthelstan's Almshouses. Almost adjoining is the Court Hall, where the Trustees and Commoners meet on the second Tuesday after Trinity to carry through the necessary formalities in connection with Æthelstan's gift of lands.

Finally, Mr. Doran Webb led the party along the Town Walls on the way to the Railway Station.

In the evening the members dined together at Chippenham, and afterwards the Rev. F. W. WEAVER, F.S.A., delivered a short address on the life of St. Aldhelm, with a reading from the Saint's poems translated from the Latin by Mr. F. Bligh Bond.

A business meeting was held, at which three candidates were elected by ballot, Miss Woodhouse was appointed as Corresponding Secretary of the Selborne Society's Plant Protection Scheme, and a contribution was voted for the excavations at Maumbury.

THE SECOND DAY, FRIDAY.

At nine o'clock the members started for the village and Augustinian Abbey of Lacock, and were received at the parish church of St. Cyriac by the Vicar, the Rev. W. H. Ramsbottom.

Mr. DORAN WEBB, in the course of his description of the church, said that it was practically rebuilt in the fifteenth century, when the transepts were added. The beautiful Lady Chapel, the latest of the structural work, had a fan-tracery ceiling and considerable remains of original colouring. A canopied tomb in the chapel commemorated Sir William Sharington, who died in 1566, the first lay owner of the neighbouring Abbey after the Dissolution. A double hagioscope, one aperture giving a view of the high altar, the other of the side altar, was a somewhat unusual feature. Among the monuments was an excellent brass of Robert Baynard and his numerous family, dated 1500. The sacramental plate included a mediæval silver chalice and cover, which Mr. Webb believed to be the *ciborium* from the

conventual church, the only one now in use, as far as he knew.

By the permission of Mr. C. H. Talbot the visitors then explored some portions of Lacock Abbey, a thirteenth century House for Augustinian nuns, the foundress of which was also the first Abbess.

At the Dissolution the Abbey and its lands were sold to Sir William Sharington, who pulled down the church and transformed the conventual buildings into a private dwelling. Thus was preserved one of the most perfect survivals of the monastic period.

Sharington, a Court favourite of Henry VIII., had a chequered career; after his acquisition of Lacock he was appointed in 1546 to be the head of the newly-constituted mint at Bristol, a position which he occupied until the second year of Edward VI., when he was dismissed in consequence of malpractices at the mint under his control. He escaped the death penalty awarded to his fellow-conspirator, Thomas, Lord Seymour of Sudeley, and was eventually pardoned, the estates being then restored to him. His initials W S appear on the coins struck by him at Bristol, and it is a curious fact that the same initials are to be seen upon his tomb in St. Cyriac's Church and upon flooring tiles used by him when altering the interior of the Abbey.

Although the conventual church is no longer in existence, the ancient cloisters are almost untouched, and are now incorporated with the more recent Tudor mansion. The chapter house, sacristy, calefactory or dayroom, and undercroft, all with vaulted roofs, tell of the former magnificence of the establishment. The dormitory and the refectory also remain, but have been divided internally.

Mr. Doran Webb, having completed his architectural and historical narrative, led the way to Lacock village, where he pointed out the "blind house," the Abbey barn, the restored market cross, and several delightful houses in that old-world spot.

FOURTH SUMMER MEETING.

STURMINSTER NEWTON.

Tuesday, 16th September.

About sixty members and their friends accompanied Mr. N. M. Richardson, the President, and the Club was once again indebted to Mr. E. Doran Webb for assistance during the day.

The place of assembly was Sturminster Railway Station, whence the party drove to the village of Hammoon, which derives the latter portion of its name from the Mohuns of Dunster ; other branches of this family were settled at Fleet and at Bothenhampton during the sixteenth century.

On arriving at Hammoon the remnants of the mediæval village cross, consisting of the broached socket stone and a section of the shaft, were first examined. Mr. W. Fisher Crouch said that he had found the fragments in April last in a ditch, and that they had since been placed on their original site. Lord Portman had proposed to complete the shaft, and so restore the cross. At the church the visitors were received by the VICAR, the Rev. G. H. WYNNE. The fabric of the building, although considerably altered from its original condition, retains many points of interest. The oldest surviving part is the thirteenth century chancel, showing a slight inclination to the North, and there is a three-light East window, which was regarded as a good example of the same period. Canon MANSEL-PLEYDELL said that before the restoration there was a Norman arch between chancel and nave, but it had been removed by an incumbent as being "very inconvenient." The fifteenth century oak-ribbed roof of the nave was described by Mr. Doran Webb as almost perfect. Other noteworthy objects were the carved pulpit, bearing the date 1635, and an Elizabethan holder for an hour glass. There is also the

socket stone of what was probably the churchyard cross, now converted into and used as a font.

The party then visited the Manor House, by permission of Mr. Crouch. This Elizabethan dwelling, with a roof of thatch and an ornate Jacobean porch, has been said to be "the most picturesque of its kind," a description with which the members were well content to agree.

IBBERTON.

A drive through Okeford Fitzpaine brought the Club to Ibberton, where they were met by the RECTOR, the Rev. L. S. PLOWMAN. The church, dedicated to St. Eustachius, stands high on the slope of the downs, and is reached by a flight of 47 steps. The Rector, in the course of his remarks, said that the fifteenth century fabric was in a sorry state before its restoration in 1900, being partially roofless and used for marriages only. The windows contained several pieces of stained glass of Tudor days, among which were medallions displaying the royal Arms of Elizabeth with the dragon of Wales as one of the supporters, the Arms of Milton Abbey, and other armorial fragments attributed to painter-stainers of the sixteenth century. There is also to be seen a chained volume of Homilies, dated 1673. Below the church rises a spring known as Stachy's Well, a local corruption of the name of the patron saint; the waters of this spring now supply the town of Sturminster.

BELCHALWELL.

This church was subsequently visited under the guidance of Mr. Plowman. The late-Norman doorway is an admirable piece of work, with chevron and dog tooth ornamentation, and the four gargoyles on the tower are also worthy of notice. In the interior, the rood-loft doorway and staircase, the hagioscope, and the panelled arch under the tower are the more remarkable features.

STURMINSTER NEWTON.

On returning to Sturminster, Canon MANSEL-PLEYDELL first led the party to Castle Hill and related the traditions concerning the Saxon stronghold, of which the only visible remnant was the deep fosse. The Gothic arches and other ruins of a building on the hill were of much later date.

Having inspected the ancient bridge over the Stour, the members drove to the Vicarage, where they were hospitably entertained by Canon and Mrs. Mansel-Pleydell.

At a business meeting three candidates for election were nominated, after which an adjournment was made to the parish church, where a short organ recital was given. The VICAR then addressed the members on the history of the church, saying that it was built by John Selwood, Abbot of Glastonbury, in the fourteenth century. In 1827 Mr. Lane-Fox pulled down and rebuilt portions of the structure, excepting only the tower and the nave. As a memorial to William Barnes, the original oak-ribbed roof had been skilfully repaired and renewed, and a carved eagle-lectern provided as part of the same scheme. The Dorset poet was born within the parish, was baptized in the church, and received his early education at Sturminster school. Before the meeting dispersed, the PRESIDENT expressed the thanks of the Club to their host and hostess, and to Mr. Doran Webb.



WINTER SESSION, 1913-14.

The first Winter Meeting of the Field Club was held at the Museum in Dorchester on Tuesday, 9th December, 1913. The President took the chair at 12.30, and among those present were the Hon. Secretary and the Hon. Treasurer.

Captain Acland wrote to express his regret at being unable to attend the meeting.

Four candidates for membership were then elected by ballot, and the Rev. H. Pentin reported four additional nominations.

Mr. ALFRED POPE read his report as the delegate of the Field Club at the meetings of the British Association in Birmingham, 10th-17th September, 1913—

The meeting was very largely attended, the official list including some 2,800 members and associates.

Sir Oliver Lodge, D.Sc., LL.D., and F.R.S., Principal of Birmingham University, the President of the Association, delivered a learned and interesting address on "Continuity."

The Conference of delegates was well attended, no less than 120 affiliated and associated Societies being represented at their first meeting.

It was presided over by Dr. P. Chambers Mitchell, F.R.S., who gave an address on "Utility and Selection." This was full of technicalities and very careful study would be required to master its details. It was decided after considerable discussion to hold next year's Conference of Delegates at Havre, during the meeting in that town of the French Association for the Advancement of Science; Australia, where the British Association holds its meeting next year being considered too far distant for the Delegates to attend.

Various matters affecting affiliated societies were discussed at this meeting, but as none of them appear to be of interest to our Club I do not refer to them.

Of the sectional meetings I attended, perhaps the most interesting was the Agricultural Section, presided over by Professor J. B. Wood, M.A., who in his very able opening address referred to the yielding capacity of cereals and how to combat the disease of Yellow Rust in wheat, and to the dietary of animals with a view to the production of the greatest weight of meat.

Sir Richard A. Paget read a paper in which he put forward a suggestion for a co-partnership in agriculture between landlord and tenant, on somewhat novel lines, and to which he is giving a practical trial on his own estates in Somerset and Wilts, the result of which should be looked forward to with much interest. Other attractive papers were read in this section, and on the whole strong opinions were expressed that farming, under proper management, might in this country be made to pay a good percentage on the capital invested.

On Saturday, Sept. 13th, excursions were made to various places of interest in the Midlands. I had the honour of joining a party of some 100 members who visited the Roman Baths at Wall, near Lichfield, the site of the Roman city of Letocetum, which had been excavated during the summer of 1912 by the North Staffordshire Field Club. The Photographs and Plan, which I secured on the site, and which I have brought for your inspection, give a good idea of the extent of these most interesting excavations.

A report was read from Mr. E. A. FRY and Mr. NIGEL BOND, who had been appointed delegates to attend the Congress of Archaeological Societies at Burlington House on the 26th June, 1913. A printed report of the proceedings had been circulated among the members of the Field Club. Mr. Fry desired particularly to call attention to the "Index of Archaeological Papers," and he hoped that the Club would support that most useful publication by purchasing copies.

The Rev. A. C. ALMACK gave notice that at the February meeting he would bring forward a motion that the Field Club should consider the possibility of compiling a record of architectural and other losses suffered by the Churches in the county since 1840 or thereabouts, and that a sub-committee should be appointed to take the matter into consideration.

Canon FLETCHER had promised to support the resolution.

It was decided to make a contribution towards a memorial to the late Dr. Alfred Russel Wallace, which would take the form of a portrait for presentation to the Royal Society, and, if funds permitted, of other memorials. The PRESIDENT also proposed that the next volume of the Proceedings should include a memoir of Dr. Wallace, who had been an honorary, and in earlier years, an ordinary member of the Field Club.

EXHIBITS.

By Mr. N. M. RICHARDSON, (1) iron filigree earrings believed to be reproductions in iron of jewellery which was given to the State by Prussian ladies during the Napoleonic wars, 1813-15; (2) an Elizabethan stoneware jug with contemporary pewter mountings which were very unusual in that metal, as silver was almost always employed. Also an unmounted specimen of similar ware; (3) an iron cross 12 inches long recently found at Sandsfoot Castle, and which was believed to be a cross used to mark a grave. This was lent for exhibition by the Corporation of Weymouth.

By Mr. HENRY SYMONDS, (1) photographs of a Late Bronze Age sepulchral urn of an unusual type, recently found at Puncknowle. This type, which formed a transition between the food vessel and the cinerary urn, was not represented in the Dorchester Museum, and it had been possible to arrange that the specimen should be added to the Museum's collection. (2) a parchment deed written in Norman French and dated 1302 with the heraldic seal of the Daumarle (or Damarell) family, who were connected with the Courtneys; (3) a "touchpiece" in copper, struck at the Tower mint during the reign of Charles I., and used at the ceremony of touching those afflicted with the King's evil.

By Dr. H. COLLEY MARCH, two fragments of coal, from his own cellar, showing the bulb of percussion and conchoidal fracture on one side and the dorsal ridge on the other side, exactly similar in result to the handiwork of the flint-knapper.

By Mr. ALFRED POPE, an Indian charm engraved upon a hard black stone and mounted in silver.

By Canon FLETCHER and the Rev. H. PENTIN, various chains and one volume to illustrate the paper by the first-named on Chained Books.

By Mrs. T. A. PEARCE, (1) a fine axe of jade from New Zealand; (2) a pair of old Dutch engravings.

PAPERS.

The PRESIDENT read a paper by the Rev. O. Pickard-Cambridge on "The Relics left by Philip and Joan of Castile in 1506 and preserved in the writer's family," which is printed in this volume.

The Rev. CANON FLETCHER read a paper on "Chained Books," to which Mr. PENTIN added some notes on the chained library at Milton Abbey Church; this will also be found in the following pages.

The meeting concluded with the reading of a paper on "Sandsfoot and Portland Castles," by Mr. HENRY SYMONDS, also printed in the present volume.



SECOND WINTER MEETING.

Tuesday, 3rd February, 1914.

The President took the chair at the County Museum, Dorchester. There was a large attendance of the members of the Field Club, including the Rev. H. Pentin, Canon Mansel-Pleydell, and Lord Eustace Cecil, a past President.

The first business was the election by ballot of four candidates for membership who had been proposed at the last meeting, and the HON. SECRETARY subsequently announced six further nominations.

Owing to the unusually large number of papers which were to be read on this occasion the Executive had not invited any exhibits.

Dr. COLLEY MARCH called attention to the desirability of a further investigation of the trench at Dewlish containing the remains of *Elephas Meridionalis*, which had been explored by their first President, Mr. J. C. Mansel-Pleydell (cf. *Proceedings* vol. x., p. 1, and vol. xiv., p. 139), and by other Dorset men, since its discovery one hundred years ago. Dr. March had been informed that the Prehistoric Society of East Anglia intended to turn their attention to this notable trench, and he thought that a Dorset treasure of such importance should be explored under the auspices of the Field Club. A discussion of the subject followed, in the course of which Captain ACLAND proposed and Canon MANSEL-PLEYDELL seconded a resolution in these terms :—

“That the Chairman (Dr. H. Colley Marsh, F.S.A.) and the Hon Secretary (Mr. Chas. S. Prideaux) of the Earthworks Committee be authorised to obtain the aid of any experts or enthusiasts, whether they belong to this club or not, in order to carry out, with the kind permission of the landowner and tenant, a thorough scientific exploration of the Dewlish elephant trench, and to gather the requisite financial means for that purpose.”

This was approved *nem. con.*

In accordance with notice previously given, the Rev. A. C. ALMACK moved a resolution dealing with church restorations, which ran as follows :—

“That the Dorset Field Club take into consideration the possibility of compiling a record of all the important architectural and other features which have been lost by churches in the county owing to reconstruction or alteration since 1840 or thereabouts, and that a sectional committee be appointed to take such matters into consideration and to report at an early date.”

In the absence of Canon Fletcher, the motion was seconded by Canon MANSEL-PLEYDELL, who remarked that his duties as rural dean brought under his notice a lamentable amount of demolition of ancient features under the guise of church restoration. Considerable discussion ensued, the HON. SECRETARY being of opinion that the work should be done through the rural deans, but eventually the proposal was adopted.

The HON. SECRETARY then reported the receipt of printed matter inviting support of the Society for Promoting Nature Reserves in this country. Sir DANIEL MORRIS briefly explained the object of the founders of the society, which was to acquire land in desirable localities and to preserve it carefully as a refuge for plants, animals, and birds.

PAPERS.

The PRESIDENT described a testamentary inventory of the contents of a yeoman's house at Woodcotte, in the parish of Handley, in the year 1627. Mr. Richardson also produced the original parchment roll, measuring 45 inches in length, and commented on many obsolete words which occurred in the list of goods and chattels.

Mr. E. A. RAWLENCE read a paper on the Folklore and Superstitions which still survived in North Dorset.

Mr. AUBREY EDWARDS read a paper on the night-soaring of the Swifts.

Mr. W. DE C. PRIDEAUX contributed a further instalment of his series of “Dorset Brasses,” and illustrated his address with a number of fine rubbings.

Captain J. E. ACLAND described the hand-made button industry which was carried on in the eastern part of the county during the eighteenth century and later. This home industry had been happily revived during recent years.

The Rev. O. PICKARD-CAMBRIDGE had written a paper on "New and rare Arachnida noted in 1913," which was read on his behalf by the President.

The Rev. E. F. LINTON, of Edmondsham, contributed the first part of a paper on the Fungi of East Dorset. Sir DANIEL MORRIS, as a brother botanist, thanked Mr. Linton for his researches and said that he had promised a botanical paper to the Congress of Scientific Societies which would meet at Bournemouth in June next.

The foregoing papers will be printed in the present volume.

Mr. W. Neville Sturt had prepared an article on "The commercial daybook (1713-18) of John Richards, of Warmwell," but it was postponed to the next indoor meeting, as the writer was absent in Germany.



ANNUAL BUSINESS MEETING.

Tuesday, 12th May, 1914.

This meeting was held at the Dorset County Museum, the President, Mr. Nelson M. Richardson, being in the chair. Among those present were the Rev. Herbert Pentin, Canon Mansel-Pleydell, Captain Elwes, Mr. Alfred Pope, F.S.A., and Captain J. E. Acland, F.S.A. Six candidates who had been proposed for membership on 3rd February were duly elected by ballot, and the Hon. Secretary read the nominations of four additional candidates.

The PRESIDENT then delivered his anniversary address, the tenth since his first election to the chair. The address will be found in the pages following this report.

Captain ACLAND proposed a vote of thanks to Mr. Richardson for his masterly summary of scientific research during the preceding year, and said that these addresses would in the future be regarded as important mile-stones marking the advance of knowledge.

Colonel MAINWARING seconded the resolution.

Mr. ALFRED POPE, in supporting the vote of thanks, paid a tribute to the versatility of the President's attainments. Mr. Pope added that the *valla* of Maiden Castle, which had suffered so much from rabbits, had been repaired and returfed by direction of the Inspector of Ancient Monuments, and were then in excellent condition.

Captain ELWES also supported the resolution, which was carried with acclamation, and the PRESIDENT expressed his thanks.

The HON. SECRETARY read his report for the year 1913, which was as follows :—

There is little to report this year. The membership of the Club has reached the maximum number—400. The Summer meetings in 1913 were well attended and there is a balance in hand of £6 7s. 5d. on my

account, so that the reduced levy of 1s. 6d. *per diem* for incidental expenses will be maintained during this summer. The winter meetings were unusually well attended, the meeting in February being one of the largest for many years. My accounts for the summer meetings lie on the table together with the vouchers pertaining thereto.—HERBERT PENTIN, *Hon. Secretary*.

Mr. Pentin's statement of account is printed on a subsequent page.

The HON. TREASURER, Canon Mansel-Pleydell, then presented an audited account of the receipts and expenditure during 1913, and explained that the re-arrangement of the Field Club's year had caused temporary anxieties owing to the fact that the cost of two volumes of Proceedings, instead of one, had to be paid out of current revenue. He expressed the opinion that the Club ought to have a room in which their books, reserve volumes, and documents could be kept.

The accounts were adopted, the Treasurer being thanked for his services and congratulated on the success which had attended his control of the finances through a difficult period. The statement of accounts will be found on a later page.

A report by the HON. EDITOR was next read. Mr. Symonds furnished a list of the papers, &c., which would be included in the forthcoming volume of Proceedings for 1914, and stated that the Field Club were indebted to Canon J. M. J. Fletcher and to the Maumbury Excavation Committee for having kindly provided the respective blocks and plates which would illustrate the article on Chained Books and the report on the work at Maumbury.

A report by Mr. C. J. Cornish-Browne, director of the photographic survey, was read by the HON. SECRETARY. The only contribution to the collection had been fifty prints from the director himself, who did not desire re-election as he was leaving the neighbourhood shortly. Mr. Cornish-Browne was thanked for his valuable assistance in making the survey, and the hope was expressed that he would still be able to add some prints from time to time. Dr. E. K. Le Fleming was appointed director, subject to his consent to serve.

Captain ACLAND read the following notes dealing with the chief additions, during 1913, to the Museum under his care :—

It is with much pleasure that I avail myself of this opportunity of describing to the members of the Field Club some of the principal recent acquisitions by the County Museum.

There have been several interesting additions to the prehistoric collections, and perhaps the most remarkable is a cinerary urn, found at Puncknoll in the year 1908. A photograph of this urn was shewn at a recent meeting of the Field Club by Mr. Henry Symonds, through whose kind efforts, in connection with Mr. W. G. Cornick of Bridport, it has now come to the Museum. The British Museum does not possess a specimen of this type, nor is one shewn in Mr. John Abercromby's great work on Bronze Age pottery, which contains over 1,600 illustrations. It was found under the foundation of an old building apparently a "Watch-tower," which had been erected on a mound, possibly a barrow. The urn was said to be protected by 4 stones standing on edge and another placed upon the top.

A second valuable acquisition of the same class, from Mr. Pike, of King Barrow, Wareham, is a fine cinerary urn discovered in a cist cut in the chalk under a barrow at East Down House, about 2 miles S.E. of Winterbourne Clenston, and $3\frac{1}{2}$ miles from Blandford. It is equal in size to the largest urn in the Museum, 22 inches high, 17 inches diam. at the top. It is of the well known Dorset "flowerpot" shape, and is practically identical with one we already have from the same locality; we could almost imagine in fact that they had been made at the same time, and by the same hand. This collection has also been increased by a gift from Mrs. Hall, of Osmington, of 3 small urns, or "food vessels," in good condition, part (probably) of Mr. C. L. Hall's original collection. She sent at the same time 8 Roman black ware vessels; 2 broken Roman fluted cups, and other fragments. Some of these are dated 1839 and 1840.

Among other relics of the Roman period, we have acquired a good flue tile and a portion of an Antefix, from Miss Oliver, of Preston; a loom weight, $7\frac{1}{2}$ lbs., found in Dorchester, and formerly in my own possession; and several objects of Kimmeridge shale from the clay pits near Wareham, given by Mr. Pike. He states that a very large number of much the same shape and workmanship are found together, such as roughly cut rings, and disks, which leads him to think they were brought there and used for some purpose connected with the pottery works. They are not turned on a lathe like the waste cores of armlets, but roughly chipped with a chisel.

More than 100 Roman bronze coins have been given by Mrs. W. Mansel, from Puncknoll. They were found in that parish, and it

appears most probable that they are the so called "hoard" mentioned by Hutchins, Vol. II., p. 769; they have been examined by Mr. Henry Symonds, who informs me that 95 are "3rd Brass" pieces of the two emperors Victorinus, who died 267 A.D., and Postumus, d. 268 A.D.; they certainly have a most remarkable similarity in condition and appearance.

Mr. T. H. R. Winwood has given us a very small but prettily worked flint scraper, less than 1 inch long; also a small flint rubber, or mulling stone. We have purchased a "Neolithic grinding stone," so named by the authorities at the British Museum; it has two well shaped hollows for holding with the thumb and finger. It was found near Lulworth. The principal objects of interest found during the excavation at Maumbury in 1913 are now in the Museum; they do not throw any fresh light on the history of the site.

The Rev. H. Pentin has very kindly sent us two encaustic tiles from Milton Abbey, one of them shewing (as he informs me) the coat of arms of the family of Clare; and from Cerne Abbey, we have also some very interesting specimens; he also sent 3 "Friendly Society Staves," one bearing the name J. Butt. Occasionally such staves have fine ornamental brass tops, and if any member of the Field Club could assist us to obtain some for the County Museum they would make a valuable addition to our collection of "By-gones," which has received recently an example of shoes worn by oxen when ploughing, and other trifles. As a loan from Colonel Pinney we have a handsome shako worn by the Dorset Yeomanry about the year 1838, and from Captain Daniell, R.N., specimens of iron round shot, in halves, found near Netherbury.

The Library has been enriched by a considerable number of books, dealing with a variety of subjects, of which I will only mention two of special interest to us "Do'set volk." The Bishop of Durham gives a charming little publication "Memorials of a Vicarage," being recollections of his early years in Fordington, 1829 onwards, a truly excellent example of what home life should be. The other comes from Miss Coombes, viz., "Unpublished Poems," by Rev. W. Barnes, published in 1870, at the School, Winterborne Monkton; also "Song of Solomon" rendered in the Dorset dialect, dated 1859; on the title page is written in M.S., "Privately printed by Prince Lucien Bonaparte, only 250 copies struck off." He visited Dorchester in 1859 to meet our Dorset poet, being an eager student of local dialects, and it was at his suggestion that Mr. Barnes undertook this somewhat remarkable paraphrase.

In "Leader Scott's" life of her father (p. 183) it is stated that the Prince was a good linguist, and devoted many years to a comparative study of local dialects. The subject he chose for comparison was "The Song of Solomon," which he had translated into scores of different dialects.

The PRESIDENT said that they were much indebted to Captain Acland for his interesting notes and for his help to the Field Club on many occasions. Mr. ALFRED POPE remarked that he would like to see the two organisations, the Club and the Museum, draw still closer together, just as the Somerset Archæological Society and the Museum at Taunton formed one body.

Mr. C. S. PRIDEAUX, as secretary of the Earthworks Sectional Committee, reported that

Since the last annual meeting of the club your committee has met twice. It was decided to deal with single parishes in succession by each two members of the committee of ten, in order if possible to survey five parishes each year. The Field Club has supplied the necessary 6in. Ordnance maps, which are therefore the property of the club, and will be sent to the secretary when the survey is completed. We are glad to report that a considerable amount of useful work has been done. But at the present rate of progress it will be 50 years at least before the whole county will be finished. We therefore want more help, and shall be glad of volunteers. It has been decided to discontinue the excavations at Maumbury Rings at present; but the Dewlish Elephant Trench will be further explored in June, a special search being made for possible traces of early man—and, judging from the large amount of correspondence received, we hope to see many visitors at Dewlish. The committee trust that members of this club will not only use their personal influence in preventing the destruction of earthworks, &c., but also report all such cases.

The corresponding secretary of the Numismatic Sectional Committee, Mr. HENRY SYMONDS, mentioned that the one find brought under his notice had occurred in the summer of 1913 at an excavation near the southern end of South Street, Dorchester, where a few third-brass coins of the Constantinian period came to light. The County Museum had received the undistributed portion of the Roman coins found at Puncknoll about 1850, which had been already referred to in the Curator's notes (*supra*).

The PRESIDENT announced that the Cecil medal and prize for the years 1913-14 had been awarded to Mr. George Nicolson, of Stavordale Road, Weymouth, for his essay on "The

utilization of natural forces for the economical production of electricity for lighting, heating, and domestic purposes, having special reference to Dorset and the neighbouring counties." Captain ELWES, as one of the trustees, presented the medal and prize to Mr. Nicolson, and stated in the course of his speech that they would in future be offered biennially instead of annually, the Cecil medal and the Mansel-Pleydell medal being awarded in alternate years. The respective prizes would be increased from £5 to £10 each. (The Mansel-Pleydell medal was not awarded this year.)

Mr. C. S. Prideaux exhibited a framed enlargement of a photograph of Maiden Castle, by Mr. W. Pouncy. On the motion of Mr. RICHARD BARROW it was resolved to buy the picture and present it to the Museum as a token of the Field Club's appreciation of the kindness always shown to them.

ELECTION OF OFFICERS AND COMMITTEES.

Mr. Nelson M. Richardson was re-elected as President, on the proposition of Captain ELWES, which was seconded by Canon FLETCHER.

The PRESIDENT nominated the Vice-Presidents of the previous year, and they were re-elected.

The Rev. Herbert Pentin was re-elected as honorary secretary ; he named Mr. H. Pouncy as assistant secretary.

Canon J. C. M. Mansel-Pleydell was re-elected as honorary treasurer. In accepting the office he again mentioned the need of increased accommodation for the Club's library, whereupon Mr. Pope offered to give a large bookcase, which was gratefully accepted by his fellow members.

Mr. Henry Symonds was re-elected as honorary editor.

The respective committees dealing with the Photographic Survey, Earthworks, and Numismatics were then appointed ; a list of the names will be found on another page.

A sectional committee, proposed by the Rev. A. C. Almack, for obtaining information as to objects of interest lost during church restorations, was also set on foot.

Mr. Alfred Pope undertook to represent the Field Club at the meetings of the corresponding societies of the British Association.

Messrs. E. A. Fry and Nigel Bond were re-appointed as delegates at the congress of Archæological Societies in union with the Society of Antiquaries of London.

Lastly, the members voted as to the places where meetings should be held during the ensuing summer. The choice fell upon Dewlish, Edington (Wilts), Lyme Regis (two days), and Christchurch.



Dorset Natural History and Antiquarian Field Club.

TREASURER'S ACCOUNT FOR THE YEAR ENDING DECEMBER 31ST, 1913.

RECEIPTS.

	£	s.	d.
Balance in hand January 1st, 1913	..	52	16
Members' Subscriptions	..	190	3
New Members' Entrance Fees and Subscriptions	..	19	2
Sale of Volumes	..	2	2
Dividends on £500 2½ % Consolidated Stock	..	11	15
		8	

lvi.

EXPENDITURE.

	£	s.	d.
<i>Engraving Blocks</i> —		3	3
Walker, Share of Cranborne Chase	..	1	12
Carl Hensdel	..	1	1
Maumbury Excavations (per Capt. Acland)	..	13	0
McFarlane, Spiders and Bixworth	..	0	
		18	17

Messrs. Sime and Co. (1)—

Printing and Binding 450 Copies of Vol. XXIII. (1912)	94	1	0
Postages and Wrappers	8	18	8
Authors' Copies, List of Members and Postages	6	19	0
Programmes of Meetings, Postages, and Addressing	17	16	6
Advertising Meetings	1	15	0
Printing Rainfall Registers, &c.	1	2	0
Phot. Survey, &c., Forms, Mr. Dicker's Portrait and in Mem.	0	16	6
Stationery	0	6	9
		131	15

Messrs. Sime and Co. (2)—

Printing and Binding 450 Copies of Vol. XXXIV. (1913)	100	1	2
Postages and Wrappers	8	14	10
Authors' Copies, List of Members and Postages	10	1	3
Programmes of Meetings, Postages, and Addressing	9	18	0
Advertising Meetings	1	0	0
Stationery	0	11	0
	130	6	3

To Messrs. Sime and Co. on account, leaving a balance due of £30 6s. 3d.

Subscriptions to Societies, &c.—

Archaeological Societies and Copies of Report	1	11	3
National Trust Society	1	1	0
Wallace Memorial Fund	2	2	0

Ling, Ordnance Maps	..	..	..
Treasurer's Postages (2 years)	..	..	..
Secretary for Editor's Postages, &c., in 1911	..	..	..
Overpaid Subscriptions refunded	..	..	..
Balance in hand, December 31st, 1913	..	..	..

Dorset Natural History and Antiquarian Field Club.

Dr. HONORARY SECRETARY'S ACCOUNTS: SUMMER MEETINGS, MAY, 1913, TO MAY, 1914. CR.

1914.	£	s.	d.
May, 1913—To Balance brought forward ..	6	19	2
Receipts from Members attending the Four Summer Meetings:			
June 5—Win Valley Meeting ..	..	16	15 0
July 3—New Forest ..	..	12	4 6
Aug. 14 and 15—Malmesbury Meeting ..	..	16	16 0
Sept. 16—Sturminster Newton ,,	..	7	8 0
Till May, 1914—By Postages, Telegrams, and Incidental Expenses (Hon. Secretary and Assistant Secretary) ..	..	..	..
By Expenditure : Summer Meetings—			
June 5—Win Valley Meeting ..	..	..	..
July 3—New Forest „	..	..	..
Aug. 14 and 15—Malmesbury Meeting ..	..	16	14 3
Sept. 16—Sturminster Newton ,,	..	..	3 15 0
Assistant Secretary's Honorarium			12 10 0
Museum Attendant's Gratuity for Three Winter Meetings..	..	..	0 15 0
Balance in hand ..	..	..	6 7 5
			£60 2 8

12th May, 1914.

HERBERT PENTIN,
Hon. Secretary.

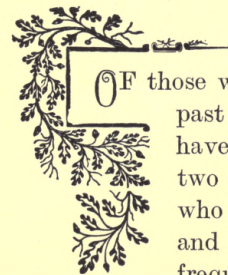


Anniversary Address of the President.

By **NELSON MOORE RICHARDSON, Esq., B.A.**

(Read May 12th, 1914.)

OBITUARY.



OF those who have been taken from us during the past twelve months I regret to say that I have again a long list to record, including two of the few Original Members of the Club who remained to us, Rev. Canon Ravenhill and Mr. George Galpin, both of whom were frequently at our meetings and will be greatly missed by those who have known them for many years. When Canon Ravenhill was Vicar of Buckland Newton, as he was for 47 years, nothing delighted him more than to get the Field Club to visit his district under his guidance and partake of his hospitality, so that the older Members are indebted to him for much of their personal knowledge of Central Dorset. Several papers by him, chiefly on family history, will be found in our Proceedings. His kindness of heart was well known, and may be

illustrated by a small incident which comes to my mind. In his latter years, when he was rather infirm, he was our host at a Central Dorset Meeting, and a lady complained much of the steepness of a hill up which we were all walking. Canon Ravenhill immediately, though apparently much the less active of the two, offered her his arm and escorted her to the top, doubtless with considerable exertion. During his last years in Dorchester he was rarely absent from our indoor meetings. Mr. Galpin always took a great interest in the Club, especially in the Natural History side of it, and has aided it in other ways, though he contributed no papers. He was one of those intelligent and appreciative Members who are always welcome. Another old Member whose loss I regret is Mr. E. W. Young, Editor of the *Dorset County Chronicle*, who joined us in 1893, and to whom we are indebted for much kind and patient work in connection with our Proceedings, in addition to the Index to the Volumes which he compiled for many years and the help he afforded in its early days to the Photographic Survey. Probably no one who has not edited our Proceedings is aware of the amount of work and often worry, not to mention correspondence, entailed, of course, chiefly on the Honorary Editor, but also in a minor degree on those who are responsible for the printing and publishing of the Volume. During the nine years that I edited the Volume, I always found Mr. Young most ready to help in any difficulty, and I feel that our thanks are partly due to him for the fine series of Proceedings that we have upon our shelves. Mr. Frederick J. Barnes, who became a Member in 1903, was interested in Natural History and Geology, and has contributed papers to our Proceedings. He also made use of his position as a quarry owner at Portland to preserve anything that he met with of rarity or interest, and many valuable specimens have been thereby saved which would otherwise probably have been neglected or destroyed. I regard this as one of the objects for which our Club exists. Mr. Jem Feacey, who joined the Club in 1905, will be specially remembered amongst us as the winner

of the Mansel-Pleydell Medal in 1908 for an excellent architectural essay. He has on more than one occasion given valuable professional help gratuitously in connection with the Field Club and Museum. Mr. Henry Duke joined at the same time, and those who were present at the Lulworth Castle Meeting in 1906 will remember how much the Club was indebted to him on that occasion for his help and information. I regret also to have to record the loss of Captain Edward W. Williams, who was elected in 1892, and of a more recent Member, Rev. P. B. Wingate, elected in 1910.

Of our Honorary Members, a most distinguished man, Alfred Russel Wallace, who was for some years after he came to live in Dorset an Ordinary Member of our Club, and was elected an Honorary Member in 1909, has passed from amongst us. His life and work have been so fully set forth in so many scientific and other publications, and also in a short memoir by our Vice-President, Mr. E. R. Sykes, which will be printed in the same Volume of Proceedings as this Address, that I do not propose to enter into it here. I will only add that we mourn his loss in common with scientists all over the world, and feel that our Club has been honoured by his connection with it.

ZOOLOGY.

In spite of the considerable agitation which has taken place with regard to the spreading of disease by flies, I believe that there is still little, if any, definite evidence that this is the case in this country, though doubtless germs have been found on the feet and bodies of flies. I refer to the mechanical spreading caused by the germs becoming attached to the flies through their resting on them, and being conveyed to another person in this way. In regard to the other method in which the germ lives inside the fly, and the patient is infected by the fly's bite as in malaria, the evidence as regards this country is extremely small, and infection in this way is not much more than suspected. I think that a little more

certainly should be arrived at before we commence the violent crusades against flies which have been advocated. I am not now speaking of other countries which may be less fortunate. Our ignorance is well exemplified by the fact that it is not yet known whether the common housefly hibernates in the perfect state or not. And may I here allude to the fact that the common housefly cannot bite, and that it is only comparatively few flies that have a biting or rather piercing apparatus, or ever use it on human beings? But an interesting association of non-biting flies with biting ones has been lately noted in India. The former attend on the latter and benefit by sucking up blood which the biting flies have drawn from the animal after or even before the latter have finished their meal. I am not aware that this has been observed in England. Again, if flies were responsible to any appreciable extent for the mechanical conveyance of disease germs, how could cows and other animals ever be free from all the available diseases, considering the swarms of flies that are always on them, piercing their skin and devoting special attention to any raw part. I cannot say, of course, that such infection never occurs; but it seems to me that it must be most exceptional. The conveyance of germs, especially those of tuberculosis in milk, seems still to be a matter of some uncertainty, and as raw milk is stated to be undoubtedly better for the general health and strength of babies than sterilised milk it has been lately urged in authoritative quarters that it should be used, the risk of infection, if any, being at all events very small. The sterilising doubtless kills the milk as well as the germs. In the same way, in experiments on the subject of spontaneous generation of life, the substances experimented with have first to be sterilised to kill all germs, and if such a thing as spontaneous generation does exist, of which I believe there is absolutely no reliable evidence, the sterilising would probably destroy any latent tendencies existing in the substance dealt with, and prevent its manifestation. The causes of the abundance or scarcity of any species of insect

in different seasons are generally very obscure, which gives importance to observations in the Lake district proving that the numbers of a sawfly destructive to larch were immensely reduced on two occasions by sudden increases in three parasites hitherto almost or quite unknown. This supports the method, sometimes successfully carried out, of introducing suitable parasites to a district subjected to any pests. The most effective device for destroying locusts in the Sudan is said to be the sprinkling of poison mixed with treacle on the herbage, which would, however, one would think, be most dangerous to animals. One of the most cleverly worked out histories of the habits of insects is that on the courtship of the Empid flies, lately published by Mr. Hamm. These flies, of which there are numerous species, have a long proboscis with which they transfix other insects and suck their juices. When a male approaches a female he brings with him an offering, which varies in different groups. In one it is an insect, which is received by the female, which sucks it during pairing. In another group a stamen or other fragment of a flower or insect is offered, with which the female merely plays. In another the male spins a cocoon round some small body, which cocoon is accepted by the female. There are many other details of these unique proceedings, into which space will not permit me to enter here. A great deal has been spoken and written lately on bird protection, and some countries, as the U.S.A., have made laws affecting the welfare not only of their own birds, but of those of other countries, by prohibiting the importation of the skins of plumage birds, and I believe that England is likely to follow their example. In the case of species that are recklessly destroyed or threatened with extermination, I think such drastic measures are justified and desirable if, as seems probable, it is difficult or impossible to enforce protective laws in the countries where the birds live. As far as I know, most of these fine plumaged birds are harmless, and some of them perhaps useful to man. But if ladies are chiefly responsible for the slaughter of these beautiful birds, men on the other hand

have, for a still more transitory amusement, brought to the verge of extinction many interesting animals, and to preserve these for the world there would seem to be no resource except strict game laws in the countries inhabited by the animals, which have been in some cases instituted. In both cases they are killing the goose that lays the golden eggs, for whether by laws or extermination the future enjoyment of these things will be limited. To turn to the brighter side, I have to record a bird new to our fauna (*Phylloscopus fuscatus*), the Dusky Warbler, which fortunately does not sound very attractive for hats—a specimen of which was captured in the Orkneys. Its usual habitat is the Eastern parts of Asia. The placing of numbered rings on birds' legs has produced two remarkable results, a swallow ringed in Ayrshire in July, 1912, having been captured in Orange River Colony on March 16th, 1913, and another ringed in Staffordshire having been taken in Natal in December. What can be the object of this immense journey! Records of this sort are accumulating and add greatly to our knowledge of migration, which was very speculative. To pass on to the mammalia it was stated many years ago by a high authority that the black buck living on a certain spit of sand in Orissa never drank water. A nearly similar case has now been pointed out in regard to a herd of gazelles living on a small island in Somaliland, where the annual rainfall is less than 3in. and pools of water are only to be found for a few days, even after a heavy shower. Doubtless this is made up for by succulent plants. The United States Government has provided a further tract of 15,000 acres for the encouragement of bison, which are increasing, and now number about 3000, a mere nothing compared to the former countless herds, but far better than the complete extinction which would have ensued had they not been preserved. More than 50 bird reservations have been established of late years in the United States, including the well-known pelican rookery in Florida. A recent interesting method of observing wild animals is by putting down attractive baits in the neighbourhood of self-

acting cameras, which are at intervals illuminated by flash-light. The animals after a time are stated to take but little notice of the light, which it is suggested that they may regard as a form of lightning. It would be most exciting if these photographs were to reveal one of the unknown large animals which there is reason to believe still exist in the interior of Africa. Of four at least there are more or less graphic descriptions from eye-witnesses, both European and native; but more than a passing sight has hitherto been wanting. The 9th Zoological Congress was held in March, 1913, at Monaco, where the Prince has founded an Oceanographical Museum for all matters connected with the ocean. Amongst other collections there is one of well-preserved deep-sea fishes, with, in each case, the original painting of the fish made immediately after capture. A new species of deep sea fish was described which was obtained from a depth of 6,035 metres—a greater depth than any at which a fish had been previously recorded. It will interest the members of the Dorset Field Club to know that one of their body, Lord Walsingham, represented Great Britain at the Congress. A young gorilla has been living in the Dublin Zoological Gardens since January. This species is a rarity in British Zoological Gardens, and it is believed that there is at present only one on the Continent, namely at Stuttgart, where it has lived for several years.

BOTANY AND AGRICULTURE.

The Botanical Section of the British Association was last year presided over by a lady, who gave a learned address on the subject of botanical embryology, to which I must refer those who wish to investigate the subject. Amongst the papers read in this Section, the one that seems most suitable for mention here is on the subject of *Suaeda fruticosa* (shrubby sea blite) which the author considers the most effective stabiliser of all British shingle plants. This plant, a small shrub with narrow fleshy leaves, is common on the Chesil

Beach, but does not grow upon the seaside, but on the shore of the Fleet backwater and on the Weymouth side of the parts of the beach between the Ferry Bridge and Portland, so that it has not here the opportunity of doing much towards stabilising or preventing movement of the shingle. I should myself have thought that, of the Chesil Beach plants, *Atriplex portulacoides*, growing as it does in large flat masses, would have had more effect than *Suaeda*, but I am not acquainted with this plant elsewhere. The sterilising of soil is now carried on by many plant growers, and enables the same soil to be used over again for potting or otherwise, after being either heated or treated with an antiseptic. It is also said to greatly increase the productiveness of the soil. Those organisms which are harmful to the beneficial ammonia-producing bacilli are wholly or partially killed, whilst the bacilli, which I presume are mostly killed too, seem to return and thrive all the more until their enemies again increase, which takes a much longer period. Experiments on the growth of the hop shew that this is greatest from 3.0 p.m. to 9.0 p.m. and least from 9.0 p.m. to 3.0 a.m., the converse having been believed to be the case by the Kent growers. Attention is called to the action of seed-eating birds as weed dispersers, through so many seeds passing through them uninjured. I can confirm this in my own garden, specially as regards the bramble, seedlings of which appear yearly in great numbers under trees in which birds are much in the habit of sitting or roosting. Other weeds away from their parent plants are doubtless frequently due to this cause where the seeds have no special arrangement like dandelions for being carried by wind. Steps are being taken to extend the growth of flax, for which this country is suitable and which is much more valuable than some years ago. British tobacco on the other hand does not seem to find much favour, its quality at one large show being expressively demonstrated in the remark that it was very suitable for fumigation! Probably, however, it would be very dependent on our variable seasons. A National Botanic Garden has been established at Cape Town, and a very suitable

site obtained with a considerable variety of ground, so that it is hoped that most of the South African plants can be successfully cultivated. The identification of different kinds of wood is an exceedingly difficult matter, except in a few cases, which fact I am led to allude to by the publication of a book on the Cabinet Timbers of Australia, which are said to be, as I have before understood, very beautiful and varied. More than 60 species are illustrated by colour photography, it is stated with great success. The recent issue of a book on Herbals, which ought to commend itself to both sides of our Club, causes me to remind you of a book much more closely connected with us, written by the Hon. Mrs. Evelyn Cecil, "A History of Gardening in England," which contains an immense amount of reliable and pleasantly-written information about these entertaining old books, as well as much else besides. We shall always remember her kindness and botanical lore on the occasion of our visit to Lytchett Heath in 1907.

GEOLOGY.

The last suggestion for calculating the age of the earth is the measurement of the amount of meteoric dust contained in the rocks, basing this on the amount of nickel. It is calculated that the earth gains 20,000 grams (about 45lbs.) of cosmically derived nickel per square kilometre per annum, which sounds an improbably large amount, as it means something like 1 grain per annum on each 3 square yards, but the actual calculation of the earth's age requires more data than are at present available. The calculation based on the increase in the proportion of lead to uranium in rocks as time goes on, the uranium changing slowly into lead, gives a very early date for the earliest sedimentary rocks of 1,300,000,000 years ago, about 4 times as much as some other methods. The observation of earthquakes, if the deductions may be relied upon, tends to throw light upon the constitution of the earth's interior. Earthquake waves from different distances travelling in a direct line to any observatory necessarily

reach different depths below the surface, and notes on the quality and rates of motion of such waves would seem to show that a change in the nature of the earth's crust occurs at a depth of about 10 miles, with some indications of further changes at about 50 and 100 miles. But a still more definite change is noted at a depth of about 2,400 miles or rather more than half way to the centre, which suggests a greater fluidity of the substance below that point. At present we have no means of confirming this, and can only await further discoveries. It is known to at least some of our members that an attempt has been made for a number of years to ascertain whether any movement was still going on between the two sides of the great Ridgeway fault, but practically none has been detected. It is known that such movements are sometimes caused by earthquakes, and have amounted to as much as 4 yards or so in a single earthquake. I am speaking, however, of such violent earthquakes as this country happily does not experience, such as the Californian earthquake of 1906. A severe earthquake occurred in Peru on Nov. 7 last, and there have been several in Panama, but the canal has fortunately escaped injury. A dreadful eruption took place last January in the volcanic island of Sakurajami, 3743 feet high, with 3 apparently extinct craters. Beginning with loud rumblings and earthquake shocks and columns of steam and dust, 3 fissures opened, and a violent eruption took place, accompanied by earthquakes, a seismic wave, volcanic dust, streams of lava, and the blowing out of the side of the volcano. Immense damage was done, with much loss of life. This volcano had been at rest for 134 years, and tradition says that that eruption in 1779 was the first of importance since the formation of the volcano in A.D. 796. I should here mention the fact (though it might more properly belong to the Engineering section) that the crater of Vesuvius has been descended, and kinematographs taken showing the small eruptions in progress. Hot springs and evidences of recent volcanic action have been discovered in Spitzbergen. The travertine basins formed round the springs contain a species of *Chara*

and a moss and 12 species of algæ new to the Arctic flora. Strata shewing the probable existence of a large post-glacial lake, about a square mile in extent, have been found at the mouth of the Tyne, in Northumberland, at an altitude of about 100 feet. These strata contain plant remains. Discoveries of petroleum of good quality have been made in Northern Argentina, which is important considering the great development in the use of this substance, which, one would think, was in danger of becoming exhausted whilst vast supplies of coal still remained. To turn to fossils, a portion of a wing of a giant dragon fly has been found in the Radstock coal measures, of such a size that the perfect insect must have had a span of something like 16 inches. It may, without an undue stretching of the imagination, be presumed that there were other insects of unusual size on which it preyed, if its habits were as rapacious as those of the dragonflies of the present day. A remarkable find has been made of the teeth of an antelope closely allied to the elands of S. Africa, in a Pleistocene cave-deposit in Maryland, U.S.A. As certain fossil teeth from India were also believed to be of this class of animal, it is suggested that it may have found its way to America in past times by the Behring Sea route. The Address of the President of the Geological Section of the British Association gave a survey of those fossil calcareous algæ, which, by abstracting lime from sea water and depositing it, have played such an important part in the formation of calcareous rocks.

ASTRONOMY.

The extreme delicacy of much Astronomical work, involving the observation of faint stars, the long exposure of photographic plates, and many other methods, the accuracy of which would be affected by the slightest movement or vibration as well as by a variable density of the neighbouring atmosphere, is causing the removal of some of the great observatories from the precincts of towns to quieter spots.

Berlin and Hamburg observatories have already taken this step, and Paris is meditating a move. Greenwich, so far, has put up with these troubles, and it is to be hoped that such a serious uprooting may be avoided. To show the difference between the present time and 20—30 years ago it may be mentioned that a hundredth of a second of arc can now be determined more accurately than a tenth of a second at the earlier period. These remarks are also borne out by the length of exposure, 38 hours 7 minutes, required in connection with researches on the spectra of spiral nebulae carried on lately at the Mount Wilson Observatory. These nebulae are found for the most part to exhibit the spectra of solar-type stars, but a small number give evidence of gaseous radiation. It is believed from certain observations that some nebulae are variable in their brightness; but the matter is one of much delicacy, and the fact is not yet fully established. The last theory as to the cause of variability in some stars is that they are Ellipsoids, uniformly luminous and rotating. When the broad side is presented to us the light would necessarily be much greater than when the narrower end was pointing in our direction. This theory apparently accounts satisfactorily for the light changes observed; and if an Ellipsoid of such a shape is sufficiently stable under such circumstances, it seems a more simple explanation than that of a light and dark body rotating round each other. In some variables, however, such as Algol, where the light becomes suddenly more feeble for a short time at regular intervals, we must fall back on a dark companion or large planet for explanation. It has been discovered by the comparison of photographs taken at different times that the bright and beautifully-coloured star Capella has a faint companion moving in connection with it at the great distance of $12' 3.3''$. Several meteors have been recorded in the past 12 months. Two large ones on June 14, one said to be larger than the moon, in the S. of Ireland, which travelled at least 490 miles, the other on the Eastern English Coast. One was observed from Bristol on Oct. 7. Another from Oxford with

a coloured tail on Nov. 24. Another on Jan. 19 last from Reading and other places at 7.0 p.m., brighter than the full moon, which burst with a loud report and much vibration. One was actually observed to fall in Zululand on Aug. 1, 1912. It weighed 38lbs., and consisted almost entirely of nickel-iron alloy. But the most extraordinary recent meteoric display was in America and Canada on Feb. 9, 1913, when three distinct groups of several meteors each passed over at intervals, following each other along the same path, each remaining in view for about 20 seconds, and in some cases finishing up with an explosion. The complete display lasted about three minutes, and there were about 30 bodies altogether, which came in sets of threes and fours, those in each set moving abreast of each other. By the time this wonderful procession had reached Bermuda most of the large leading bodies had disappeared, whilst the number of groups and trailers had increased. It would be a painful thing to have to give up the idea of the wonderful canals on Mars of which we have heard so much, and to which has been ascribed such extraordinary significance; but everything has its day, and it is now suggested that recent observations tend to resolve them into disconnected knots of diffused shadings. How far this is accepted by astronomers I do not know, but it is accompanied by a statement that Mars is almost always in a frozen condition, and is therefore probably not inhabited at all. But it seems to me that, considering the great variety of man and animals found on even this our earth, it is by no means fair to assume that Mars cannot contain intelligent or other beings on account of the fact that its temperature approaches that of our Arctic regions, for even there life is by no means absent, as the Esquimaux manage to survive, and on Mars there may exist a far more hardy race. But whether we shall ever be able to do more than theorise is doubtful. Coming now to our earth and its satellite, it has been calculated that the brightness of the earth's albedo or earthshine is about 1-1600th of that of the rest of the moon. Attempts which have lately been made to photograph the

moon through coloured screens have shown the presence of a remarkable deposit round the crater of Aristarchus, which may be sulphur, which, if proved, would settle the question of the volcanic origin of these crater-like forms, which have been attributed to the impact of huge meteorites, though if this were the case why should our earth, with its greater powers of attraction, not present similar features? A change, not at present explainable, was observed to take place early in 1913, in one of the lunar craters, Eimmart, which formerly at each lunation a white material seemed to fill and overflow. This phenomenon is no longer visible, and other differences have shown themselves, which in such an unchanging body as the moon are very striking. Some delicate observations undertaken to investigate the presence of radium in the chromosphere of the sun have shewn that radium and its emanation, neon, argon, krypton, and zenon, are all probably absent from the chromosphere. The latest theory of the formation of sunspots is that they are caused by the impact of pieces of Saturn's rings struck off by the Leonid meteors. This seems far-fetched, but like many other wild-sounding theories has some basis of support. The year 1913 has been marked by an absence of sunspots more striking than in any year since 1810 ; but as a large sunspot has lately been developed the minimum period would seem to be at an end. Preparations are being made for viewing the total solar eclipse of Aug. 21 next, visible from Norway. The next one visible from England will be in 1927, the last one seen from this country having been in 1724. It is satisfactory to learn that Canada will before long possess a very fine reflecting telescope, with a mirror of 6ft. in diameter.

METEOROLOGY.

It would be difficult and not so satisfactory to consider the weather for the past 12 months, starting backwards from May, as all the weather statistics are made up to the end of December. The mean temperature of 1913 was in excess of

the average over the whole of the British Isles, the excess amounting in the Midlands and East of England to 2° , in spite of the fact that the summer was cool and sunless. The summer was also dry, and in most parts the amount of rain for the year was below the average, Ireland, however, having an excess of 5 per cent. The same statement also applies to the rainfall of the past winter. At the British Association Meeting the subject of the comparative departures from the normal temperature at the same time in different countries was brought forward, investigations having shewn that with regard to Egypt and S.W. England the abnormal heat in the latter in 1911 had been contemporaneous with an abnormally cool summer in Egypt. On comparing the returns for 34 years it was further found that the departures from the normal in the two countries were in opposite directions in all seasons, but the results were much more definite in the first and last quarters of the year. This discovery will doubtless produce definite results in the comparison of other countries as regards temperature, and advance our present very small knowledge of its laws. One of those destructive tornadoes which occasionally visit us and uproot trees, &c., in their path, which is fortunately a narrow one, occurred on a larger scale than is usual in this country, in S. Wales and in the later part of its course, in Cheshire, on Oct. 27th last. The width of the storm was about 200 yards, but along its course two men were blown away for considerable distances and killed, buildings were wrecked, trees uprooted, and great damage done. Egyptian statistics shew that during 45 years (1868—1912) only 180 thunderstorms, including all observations of even slight lightning, were recorded, and only 28 cases of hail or heavy rain. The forecasting of the weather is still unfortunately a very uncertain matter, and from comparisons with the actual state of things it has been deduced that not very much more than half of the forecasts are correct. Investigations of the upper air by means of balloons have altered our ideas about it almost as much as the discovery of radium has done about the temperature of

the earth, and no doubt in course of time forecasting will improve; but at present the influences which determine the weather seem very complicated and difficult to grasp. Observations of clouds at Epsom, continued for eight years at hourly intervals, shew that the commonest form of cloud is cumulus, which occurred on 1622 days, stratus coming next with 1155, as well as many other facts connected with clouds. It has been suggested that the presence of volcanic dust in the atmosphere is responsible for a diminution of the amount of the sun's heat reaching the earth, which seems to be borne out by the agreement in the past 150 years between eruptions and cold periods. A valuable contribution has been made to our knowledge of the Aurora by a series of simultaneous photographs of Auroræ at two stations about 17 miles apart, which will afford data for working out details as to their form, position, and altitude. The rate of movement of Greenland glaciers has been found to be from one to two metres per day. Both these and glaciers in Norway and North America seem to be retreating in position, as are many of those in the Alps, whilst most of those in the Pyrenees are advancing. The Grand Pacific Glacier in N. America has gone back the great distance of 25 kilometres in 33 years. Experiments continue to be made with regard to detecting the neighbourhood of icebergs, the most reliable method being the observation of the fall of air-temperature caused by them even when at a considerable distance. They rarely give an echo, and the temperature of the water near them is uncertain. A Government grant will probably be made this year for the purpose of research into this matter. An interesting book by our former V.-P., Dr. Vaughan Cornish, on Waves of Sand and Snow, has lately been published. We have to thank him for several valuable papers on this and kindred subjects, in our past volumes.

ELECTRICITY.

At the Berlin Meeting of the International Electrotechnical Commission, at which no less than 24 nations were

represented, one of the most important points debated was that of nomenclature. It was decided that French should be the standard language, and that a vocabulary should contain the official equivalent words in French, English, German, and Spanish for electrical terms, difficulties having arisen in practice, especially in Spanish. An International Commission has been appointed to make experiments on the propagation of electric waves, the station at Brussels being used as a centre. The effects and causes of natural electric waves are also to be investigated. Another case of the value of wireless telegraphy as a means of life saving was provided by the steamship *Volturmo*, which was burnt at sea in October last, when 10 steamers responded to the call for help and saved all on board who were still alive. The effect of oil in calming the raging sea was also strikingly demonstrated, one of the steamers having a cargo of oil which, when thrown on the water, enabled small boats to reach the burning ship, though a violent gale was blowing.

CHEMISTRY.

Much discussion took place at the last British Association Meeting on the subject of the nature of the Atom, it being supposed to be in one case a minute nucleus surrounded by electrons. The chemical analysis of matter was also greatly to the fore, ideas on the subject having been so much affected by the discoveries in connection with radium and its changes and emanations. The President of the Chemical section says "The common origin of all elementary substances is now an accepted theory"—though I think that such words to the ordinary observer would be a little disappointing when he found that the desires of the old alchemists had not advanced much nearer fulfilment than when they devoted their lives to the transmutation of other substances into gold. He also in his Address throws out a warning to those who, because certain vital products can be produced by chemical processes, jump to the conclusion that all chemical changes in living substances are brought about

by ordinary chemical forces. He points out that we are far from being able to reproduce such products by means similar to the vital ones, and until we have some definite knowledge of how the vital processes are carried on and can imitate them in our laboratories we have not much ground to go upon. The National Physical Laboratory is now in possession of a British Radium Standard, and is prepared to standardise preparations of radium and mesothorium. The chief source of radium is the mineral carnotite, from Colorado, and, the process of extraction having been improved, more can be obtained per ton of ore. It has been found that the percentage of radium in accessible rocks is much more than enough to sustain the earth at its present temperature, were it to be as abundant through its whole mass. In order, therefore, that the earth may be kept at its present heat it seems necessary to assume that the bulk of the radium it contains is concentrated near its surface. Remarkable results have taken place by passing X-rays through zinc-blende and other crystals, the issuing rays, when received on a photographic plate, recording a geometrical pattern of spots, which, by placing photographic plates at different distances, are shewn to be formed by rectilinear pencils of rays spreading in all directions from the crystal. These appear to be the reflections of the X-rays from the similar and similarly situated planes of atoms composing the crystal, in other words the planes of the space lattice. It is considered as more likely that the reflections come from the sides of one set of atoms composing the molecules of the crystalline substance than from the sides of the actual molecules, and that much may be learnt from these experiments of the atomic structure, and perhaps even of the size and other details of the atoms themselves, and that it forms a new departure in our knowledge in this respect.

ENGINEERING.

The development of aeroplanes is still continuing, and is perhaps most strikingly seen in the wonderful feats accomplished by certain aviators which are so much before the

public. The accidents are said to be less numerous, but are sufficiently so to class aviation still as a very hazardous pursuit. Some advance has been made towards automatic controls which keep the aeroplane stable and prevent the upsetting effects of unexpected currents of air, but there appears still much to be desired. There seems to be much difficulty in the satisfactory application of mathematics to the science of aeroplane stability, and what has been accomplished in this respect has been chiefly the result of experiment. A new record of height has been established, a French aviator having reached an altitude of 20,300 feet. The International Conference on the Safety of Life at Sea, instituted in consequence of the loss of the Titanic, lays special stress on three points—namely, a service for the observation of icebergs, wireless telegraphy on ships above a certain size, and an adequate supply of lifeboats, with convenient means of launching them on either side of the ship. Some interesting experiments made on the reciprocal attraction of two ships passing near to each other, show that this constitutes a very appreciable source of danger, as the tendency to collision is considerable, especially when the speed is low. Great trouble has been experienced from the ravages of the Teredo in Auckland Harbour, New Zealand, many kinds of wood having been tried without any success. Now the remedy has been found in ferro-concrete, which is unaffected by any boring animal. The largest turbo-generator yet made has been built at Newcastle-on-Tyne for Chicago, and gives excellent results. The President of the Engineering Section of the British Association dealt chiefly in his Address with the Electrification of Railways, which he advocated, giving many details of cases in which it had been adopted.

GEOGRAPHY.

The subject of Geography is a most comprehensive one; but, as a matter of fact, most of the items which might be treated of under it fall more naturally into

other sections, so that what remains is but little, and that, now-a-days, chiefly in connection with the Arctic and, more especially, Antarctic expeditions, which have of late been so numerous and borne so much fruit. Now that the Poles have both been reached, some of the romance of these has vanished ; but there is still much to learn, and most of our globe is getting so well known and mapped that no great geographical discoveries are possible. A new piece of Arctic land has been discovered by some Russian ships north of Siberia, consisting of a coast of about 200 miles in extent. The Mawson Antarctic Expedition has returned with much scientific information about those regions, gained, unfortunately, at the expense of a tragedy somewhat similar to that of Captain Scott and his companions, but in which the leader was spared. Two more expeditions are starting, one under Sir Ernest Shackleton, the other under Mr. Foster Stackhouse. Of other expeditions, the Yale one to Peru has thrown light on that remarkable people, the Incas, who formerly inhabited it. The city indicated in their national legends as their original home has, it is believed, been identified, and the wonderful masonry of the temples, the cemeteries, and the pottery and bronzes found in them are described in the report. In Brazil, again, a large area of unknown country has been mapped. In the Himalayas a height of 24,600 feet has been reached, the highest yet attained by man—a feat showing great energy and endurance. Accounts of various other travels are given in the Geographical Section of the British Association, and its President dwelt upon the prospects of the food and other supplies for future generations when the earth's population should have increased and multiplied, and the amount of unoccupied land should be comparatively small. An increasing population is generally supposed to be an advantage to a country, but there is another side to the question, and it certainly seems to me to be not without its disadvantages. The people who, on the other hand, decrease in numbers and tend to die out are certain native races who come under

white men's influence, such as the Australians and neighbouring nations. The Andaman Islanders appear to have suffered in this way, as their numbers in two groups of islands are now reduced to 455 out of about 3,500 in 1858, when British occupation began. Those by whom civilisation has not yet been adopted, however, still survive and flourish.

ANTHROPOLOGY AND ARCHÆOLOGY.

The excavations at Maumbury Rings being now finished, the Earthworks Committee of our Club proposes this year to turn its attention to the Dewlish Elephant Trench, a great part of which was explored in 1888 by our late President, Mr. Mansel-Pleydell, whose finds of tusks and other portions of *Elephas meridionalis*, a gigantic elephant standing 17 feet high, are in our Dorset Museum. [See Proc. D.F.C. X., 1.] This proposal originated from a suggestion that the trench was of artificial formation and made by prehistoric man as a trap to catch elephants; but the evidence of this is so far confined, I believe, to the finding of a few so-called eoliths, which may or may not be of natural formation and could have but little weight in deciding the question. Geologically, doubtless, the excavation will prove of interest. To revert to Maumbury, one of the results that seemed to me of most importance was shewn in last year's work by the discovery that on the East side, just inside the bank, was a series of prehistoric pits, similar and similarly placed to those previously discovered under the opposite bank. The natural and almost unavoidable conclusion is that the present banks, or rather others on which these were raised, were made in connection with the pits. As to what the connection was, and what was the exact object of the pits, it is difficult to say. The theory that they were excavations for the purpose of obtaining flints seems to me insufficient on account of their number and regular formation, when one ordinary quarry would have afforded a much larger supply of flints with far less work. The theory of storage or hiding places appears

to me more probable. Excavations have been carried on in many places. In Egypt a 1st dynasty cemetery at Tarkhan has been examined, and is considered to prove the presence there of the conquering tribe of Egypt who eventually founded Memphis, who appear to have been slightly shorter than the native population. At Meroë more Roman objects have been found, showing a probable occupation by their troops. At Abydos a large reservoir has been found and two gigantic colonnades leading into a great hall, which appears from inscriptions to be the celebrated tomb of Osiris. On the Palatine Hill at Rome has been discovered the famous Mundus supposed to lead to the infernal regions. The pit is covered by a square roughly hewn slab of tufa, pierced by two holes. In Guatemala a series of temples has been brought to light, containing many carvings and hieroglyphs of at present unknown interpretation. At Carchemish and elsewhere works have also been carried on. At Pompeii the remains of the ancient harbour have been found, about 1,300 yards from the present seashore, covered with a layer 23 feet deep. In Ionia a remarkable collection of ancient Greek surgical instruments has been discovered, all of bronze, except two of steel. The collection is to go to an American Museum. Nearer home, excavations in the shell-mounds of the Scotch Island of Oransay have produced numerous early bone and horn implements, and at Corbridge a large find of Roman articles has been made—pottery altars, a bronze pig containing gold coins, and many other things. From an Anglo-Saxon Cemetery at Hornsea a series of bronze brooches similar to ones found in Norway, a bell, and food vases without any ornamentation were obtained, and are now in the Hull Museum. In Kinkell Cave, near St. Andrews, a slab of red sandstone with incised crosses is considered by the excavators to be one of our earliest Christian relics. A discovery of pigmy flints of various forms has been made in Scotland near the junction of the Feugh with the river Dee. A flint workshop floor containing numerous hammer-stones, cores, worked flints, flakes, pot boilers, fragments of pottery and animal bones

has been found at Ipswich. Also in Suffolk, flints stated to be humanly worked, with barnacles of the Red Crag Sea attached to them, have been excavated from the base-beds of the Crag. Excavations and other investigations in France have tended to prove that different types of Palæolithic implements occur in succession in the same order at different places, and show their gradual development from an early form to the latest. Recently, excavations in Kent have shown a similar succession of types from the Strépy in the lowest stratum through Chelléan, Chelléan évolué, St. Acheul, Solutré, and Le Moustier, forming a similar sequence to that of the Somme Valley. The subject of worked flints is a difficult one, as many of the forms are doubtless produced by natural causes and are probably even harder to distinguish from the ancient artificial ones than some modern imitations of antique china and glass are to tell from the really old specimens. Under these circumstances little reliance can be placed on them as evidence unless the traces of human manufacture are clear and indisputable. Much further discussion has taken place as to the shape of skull which the Piltdown fragments represent and as to its age, about which opinions differ widely. It also seems doubtful if the Galley Hill and Ipswich skeletons are nearly so old as they have been represented, the evidence being unconvincing. It is improbable that any really early human remains have yet been found in S. America, and I believe that none have been discovered in S. Africa, though quantities of Palæolithic implements have occurred in the latter country. A discovery of what may be an ancient skeleton has lately, however, been made in German E. Africa, the man being stated to have had 36 teeth, some of which were filed, a curious habit for a very early race, and one which throws a little doubt on its supposed age. What is believed to be the earliest known drawing of a human figure has been found engraved on a mammoth bone in the upper Aurignacian layer near Poucin, in France, and numerous paintings in red have been found on rocks in caves in Spain, some shewing men hunting the stag. An apparently

Palæolithic engraving of the fore part of a horse on a fragment of rib has been found near Sherborne in an old mound of débris from a quarry, the only other similar British specimen having come from the Creswell caves. The specimen is, I believe, in the Sherborne School Museum, and has been described by our Hon. Member, Dr. A. Smith-Woodward. On the evidence of certain beads now in the Devizes Museum, and pronounced to be Egyptian of about the 14th Century, B.C., the erection of Stonehenge is ascribed to that period. This agrees fairly well with other available evidence. In this section I would note the purchase of Maiden Castle by the Duchy of Cornwall. Above all things it is important that this magnificent camp should be preserved, as far as possible, in its original condition, and we all, I am sure, trust this will be done under its present ownership. I also wish to call attention to two books of great interest to our Antiquarian Members lately published on Dorset, one "The History of Beaminster," by our Member, Mr. Richard Hine; the other, "The Ancient Earthworks of Cranbourne Chase," by Mr. Heywood Sumner, whose kindness and hospitality as our guide to the New Forest Potteries last year we shall all remember.

GENERAL.

The Society for the Promotion of Nature Reserves has lately been formed in this country for the purpose of acquiring and preserving in a wild state suitable pieces of land. Of these there are many in Dorset which still afford shelter to certain plants and animals which anything approaching cultivation would destroy. Even such an unattractive patch as the Chesil Beach, between the Ferry Bridge and Portland, contains species not found elsewhere in England, and this in spite of the fact that a road runs along the middle of it; but there are also many much more beautiful spots well worthy of preservation. In Germany since 1907 there has been a State department for this purpose, and many tracts have been preserved in this way to the great advantage

of both the present nation and posterity. At the British Association Meeting the Education Section discussed a variety of points connected with that subject, amongst others the advantages of making museums more educational. I think myself that the first duty of a Museum such as ours is to collect and preserve what might otherwise be lost, and the second to exhibit what it has in such a way that its visitors may learn as much as possible about each object. Spelling reform, by which I presume is meant phonetic spelling, seemed to find some favour; but I cannot understand how any educated person can bear the sight of it! We should have no clue to the meaning of the many unfamiliar words we so often now meet with. One thing has struck me very forcibly of late years, and is, I believe, a direct result of over-education and general civilization. It is that now no one (with few exceptions) is able to do anything for him or her self, but must go to a professional for it. If people were less educated and more self-supporting I am sure that the general comfort and happiness would be vastly increased, and there would be less of that restless spirit which is always wanting some new excitement. I also think that they would have more general useful knowledge than they appear to have under the present system. I am by no means against education, but I think that for one thing the future walk in life of the pupil is not sufficiently considered, and too many things are taught indiscriminately to all. The President of the Education Section of the British Association, at the beginning of his masterly address, mentions the fact that we are now spending £34,000,000 per annum on education, and says "it appears difficult to find distinct evidence of improvement in any way commensurate with the sacrifices which have been made." Anyone who is interested in this subject should read the whole Address. I have been speaking, of course, of general education. Higher Education for those who have shewn themselves fitted for it is a different matter, and must be kept at a high level in order that the knowledge of the world may be preserved and

utilised. Educational and civilizing methods as practised by the Japanese in Formosa would, I fear, not be tolerated here, though they might sometimes be useful. The Aborigines are enclosed in a highly-electrified wire fence 300 miles long, which kills any who touch it. Any native wishing to submit is handed over to the authorities to be civilized and educated ; but the details of the process must be left to the imagination, as I am ignorant of them. The Metric system is spreading in the world, and some small steps towards it have been taken in this country. It has undoubted advantages for convenience of calculation, but the change would be difficult. Last year, for the first time, a separate sub-section of Psychology was formed at the British Association Meeting, and attracted a large number of auditors. It was also touched upon by the President of the Association in his Address, but the subjects dealt with in the various papers do not seem to have gone outside matters connected with the working of the human and animal minds, little, if any, of what is generally known as spiritualism being contained in them. It has been the habit of the British Association of late years to hold its meetings occasionally in some of our Colonies, such as Canada and South Africa. This year for the first time it has been decided that it should visit Australia, and thus do its share in realizing the union of the British Empire even in its most distant shores.





Alfred Russel Wallace.

A Memoir by E. R. SYKES.



BY the death of Alfred Russel Wallace the last link with the great workers on evolution, whose names adorn the mid-nineteenth century, is broken. One by one, Darwin, Hooker, Huxley, &c., they have passed away, and now death has taken from us the last, and one of the greatest.

We, of the Dorset Field Club, have a special interest in Wallace ; he was an Ordinary Member of the Club for some years, and in 1909 became one of our Honorary Members ; to many of us he was personally known, and not a mere abstract personality.

Born on January 8th, 1823, at Usk, in Monmouthshire, he was educated at Hertford Grammar School, and for a short time assisted his brother as a land surveyor. Later, he became a schoolmaster at Leicester, and there, about 1845, he became friends with H. W. Bates, whose works on the Amazon Region are so well known. This was a turning point in his career for, in 1848, he and Bates, both already keen students of nature, went out together to study and collect animals and plants in South America. After a short time they separated, and Wallace spent four years in the country, exploring the Rio Negro. Unfortunately the bulk of his collection was lost, owing to fire on the ship by which he returned home. In 1854 he started on his classic expedition

to the Malay Archipelago, then but little known ; this lasted no less than eight years, and he brought back the vast store of over 125,000 specimens. On the materials so collected and his geographical studies were based his "Island Life" and "Geographical Distribution of Animals," while we may also note his discovery of what has been called "Wallace's line," dividing the Archipelago into two distinct regions, with entirely different faunas.

We may now turn to his epoch-making work, by which the name of Wallace will ever be remembered. While still in the Malay Archipelago he sent home to Darwin his essay "On the tendency of varieties to depart indefinitely from the original type," which, to the latter's amazement, proved to be in theory and reasoning precisely similar to the great work on which he himself was then engaged. It was eventually arranged that a joint paper by Darwin and Wallace should be read at the Linnæan Society, and in 1858 this was done. After a stormy controversy the great theory of the survival of the fittest has met with universal acceptance, and the foundation-stone of modern biology stands firm and secure. To us of the present day it is hard to realise that what has been well called one of the driving forces of the world, and which seems to us but a simple truth, should have been found so hard to accept. Incidentally, we gain some insight into the working of Wallace's mind, into which, after a long period of, no doubt, unconscious preparation, decisions flashed. The above conclusions came upon him suddenly, and we know that he said of himself "I am a believer in inspiration. All my best theories have come to me suddenly."

Characteristic of his enquiring mind was it, that he never considered the details of the theory as finally settled. He was far from accepting the whole of the "Origin of Species" verbatim, and, in later years, he endorsed the somewhat diverging views of Weissman. Finally, in his "World of Life," he expressed his disagreement with the view attributed to Darwin, that man, like all other animals, has been produced by the unaided operation of natural selection.

From this time onwards Wallace occupied his rightful position as one of the leaders of scientific thought; slowly, but steadily, recognition and honours poured in upon him; and he held his place till death, on November 7th, 1913, in his ninety-first year, removed him from amongst us.

It is impossible in a brief memoir like the present to give any real survey of Wallace's scientific or other work. An author who dealt with such widely-sundered subjects as Island Faunas and Spiritualism, the theory of evolution and State ownership of land, is not to be summarised in a few paragraphs. For a moment we may turn to his "Island Life," a summary it may be said, but a summary welded by a master hand. Here, after a brief essay on distribution, he points out that the key must be sought in evolution; and after dealing with glacial epochs and changes of climate, he gives a detailed survey of the fauna and flora so far as known, the result being a book of great value, not only to the specialist, but also to the general reader. In his "Malay Archipelago," again, we find most valuable observations, not only on the animals and plants, but also on the native races and their history; and that he risked many dangers in the cause of science, the mere account of his voyage from Waigiou to Ternate, in 1860, is sufficient to show.

The influences which lead men to become what they are, though often apparently small in themselves, afford an interesting study. In the case of Wallace, his taste, already slightly developed, for zoology and botany, no doubt received a great stimulus from his friendship with Bates. This association largely led to the first expedition to South America, and, gradually, the collector became the master mind, using his collections in the way they should be used—as materials for study.

To take another instance, his views on the State ownership of land may be traced to his association with his elder brother, a surveyor, and to the experience this gave him.

Patient, industrious, broad-minded, with wonderful powers of concentration, the world has lost a great naturalist and philosopher.



PHILIP AND IOAN.



DESCRIPTION OF PLATES.

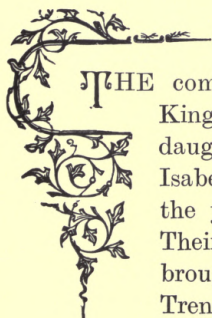
- PL. A. Portraits of Philip and Joan.
" B. { Fig. 1. Porcelain Bowl in silver-gilt strap-mounting.
" " 2. Inside view of Bowl.
" C. Iron Chest—front and back views.
" D. Cedar Chest.



On the Relics
Left by Philip and Joan of Castile in 1506
at Wolfeton House, Dorset,
and Preserved in the Writer's Family.

By Rev. O. PICKARD-CAMBRIDGE, M.A., F.R.S., C.M.Z.S.,
&c.

(PLATES A, B, C, D.)



THE coming of Philip Archduke of Austria and King of Castile with Joanna his wife, eldest daughter of Ferdinand King of Aragon and Isabella Queen of Castile, to Weymouth in the year 1505 is a matter of English history. Their appearance at Weymouth was at once brought to the notice of Sir Thomas Trenchard of Wolfeton, the High Sheriff of the County of Dorset, by the Weymouth authorities, who were naturally alarmed by the appearance off their port of a Spanish Fleet of 80 ships. Sir Thomas Trenchard seems to have immediately put himself in communication with the Government Authorities in London, and himself became the host at Wolfeton of Philip and Joan,

both as eminent personages really in distress, and who afterwards continued to be his guests for a prolonged period at the instance of the English Government. Thus it was that King Philip and his Queen Joanna with all their retinue were in residence at Wolfeton House for a considerable time, and would necessarily be accompanied by much baggage and other *impedimenta*. They were also, evidently, unable to speak English, and a relative of Sir Thomas Trenchard's (Mr. Russell, of Kingston Russell, Dorset), who had lived in Spain and was conversant with the Spanish language, became then a guest also at Wolfeton, and acted as an interpreter. Mr. Russell afterwards accompanied Philip and Joan to the Court of the reigning King of England (Henry VII.), in London, and there laid the foundation of the existing House of Bedford. All this, however, is a matter of English History, and it is not my purpose to go further into it here. We have information on all the above in Hutchins' History of Dorset (3rd Edition, Vol. II., pp. 421, 780, 781, also Vol. III., pp. 329, 330). My object in the present paper is simply to bring together in a connected form a short account of the still existing proofs of Sir Thomas Trenchard having been a kind and honoured host to Philip and Joan, by their presentation to him, on their departure to the Court of Henry VII., or shortly after, of their Portraits and two valuable specimens of Oriental Chinese Pottery. In addition to these, their Majesties left behind them various articles of baggage, which had, doubtless, become useless to them and so mere *impedimenta*, such as some Iron Chests (in which their money and other valuables had been contained) and Wooden Chests containing probably linen and clothes and other articles needed in a voyage such as that in which the King and Queen had been interrupted. Some of these chests were perhaps left by them at Weymouth; but it is most probable that all, or nearly all, went to, and remained at, Wolfeton House. Hence it is quite possible that some may have found their way into the possession of other persons; but at any rate some of them, if not all, remained at Wolfeton House and

have come down to their present possessors in an unbroken line from Sir Thomas Trenchard through John Trenchard, of Newton House, Sturminster Marshall, Poxwell, and Ringstead, Dorset, by whom they were left, or the greater part of them, including the Portraits and Chinese Bowls, to the late John Trenchard Trenchard, of Poxwell and Ringstead, and Greenhill House, Weymouth.

The relics above alluded to and which I propose to describe and figure are—i., Portraits of the King Philip and Queen Joanna ; ii., Two Chinese Oriental Porcelain Bowls ; iii., Two Massive Iron Chests ; and iv., One Large Cedar Chest.

The *Portraits* measure $19\frac{1}{2}$ inches square to the outside of the frames. Engravings were made from them in 1801 by an eminent portrait painter and engraver (C. Bestland) at the instance of John Trenchard of Newton House, Sturminster Marshall, and were intended, as I have understood, to illustrate the account in Hutchins' History of Dorset of their Majesties' visit to Wolfeton. Much, and in some respects unfavourable, criticism has been made by some members of the family in regard to the rendering of the portraits by Bestland, and it is believed that their rendering in the present paper, from the good photographs now exhibited, is more accurate and a manifest improvement. As to the artistic value of the portraits I am not qualified to speak. The ornament round the King's neck represents the English Order of the Garter, conferred upon him by King Henry the VII., and was worn by Philip, when the portrait was painted, in compliment to Sir Thomas Trenchard. The portraits were most certainly, as Bestland remarks, painted at the time of the King and Queen's visit to Wolfeton, and expressly for the purpose of showing their Majesties' deep sense of gratitude and approval of the treatment shewn them by Sir Thomas Trenchard while at Wolfeton. I am not sure that anything is known as to the artist by whom these portraits were painted, but presumably it must have been by some Spanish painter.

The next objects I would mention are the two Oriental Chinese Porcelain Bowls, one of which is enclosed in a handsome silver-gilt mount of strap-work, bearing London hall marks inside, dated 1549. This date being over 40 years subsequent to their presentation to Sir Thomas Trenchard shews that the mounting must have been added by the Trenchards, long perhaps after the bowls came into their possession, and no doubt it was added to do honour to Philip and Joan's gift. The bowls themselves are of ordinary shape and appearance, 7 or 8 inches in diameter; and one of them (the one mounted in the strap-work mentioned) is considered by experts to be the better one of the two. They are said to belong to the middle of the Chinese "Ming Dynasty," or possibly earlier, *i.e.*, 1465-1488 A.D, and are of blue and white ware, decorated with flowers, and inside are represented four fish swimming round another fish enclosed in a circle in the centre. Nothing appears to be known of the silver-gilt mounting, nor have I ever heard any explanation of its details. A figure of the bowl is given by Mr. W. G. Gulland in Vol. II. of "Chinese Pottery," second edition, 1902, p. 277, figs. 486, 487. This figure, however, was engraved from a very inferior photograph, and gives no clear representation of its details. The figures given in the present paper are much more accurate in their details, especially of the strap-mounting. A figure of the bowl is also given by Mr. Sydney Heath and Mr. W. de C. Prideaux in "Some Dorset Manor Houses," 1907, facing p. 38. But this figure, engraved from the same above-mentioned inferior photograph, also shows its imperfections. It may be mentioned here that the silver-gilt mounting of the bowl is said to be in the "Renaissance style" of the date which it bears, being thus as before observed many years subsequent to the gift of it by Philip and Joan to Sir Thomas Trenchard, and to have nothing Moorish in its character. The above two portraits and the bowls are in the possession of Mrs. F. G. A. Lane, of Bloxworth House, daughter of the late Colonel Jocelyn Pickard-Cambridge and grand-daughter of the late

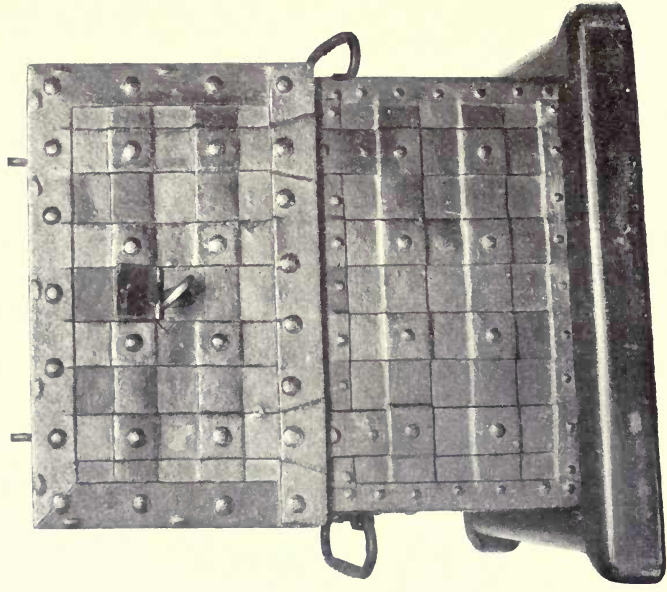
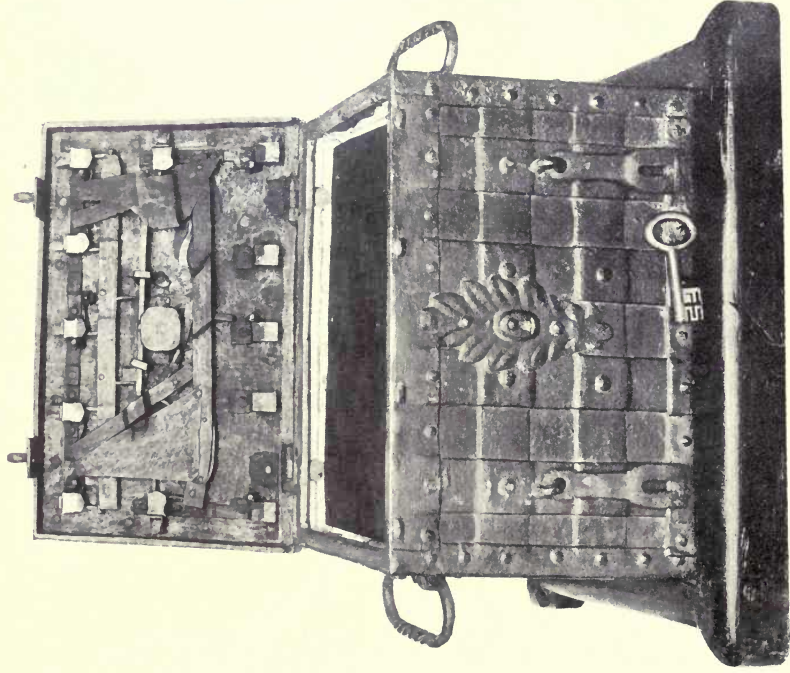


FIG. 1.



FIG. 2.

CHINA BOWL.



IRON CHEST.

Rev. George Pickard-Cambridge, of Bloxworth House and Rector of Bloxworth.*

Passing on to the two Iron chests, the rather larger one measures 2ft. 3in. in length, 1ft. 5in. in width, and 1ft. 8in. in depth; it is very massive, and its structure can easily be seen from the very accurate photograph exhibited, quite precluding the necessity of a technical description, even if I were qualified to give it. One of the views given of it shews the work on the front and on the inside of the lid; the other view shews the outside of the back and lid. The original key is also given very accurately, and is six inches in length. The apparent keyhole in the front is a sham, the real one being at the middle of the lid. This chest, formerly in the possession of the late John Trenchard Trenchard, of Poxwell and Greenhill House, Weymouth, has from him come now into the possession of his great nephew, Jocelyn Pickard, R.E., and only son of the late Rev. Henry Adair Pickard, M.A., of Airedale, Oxford.

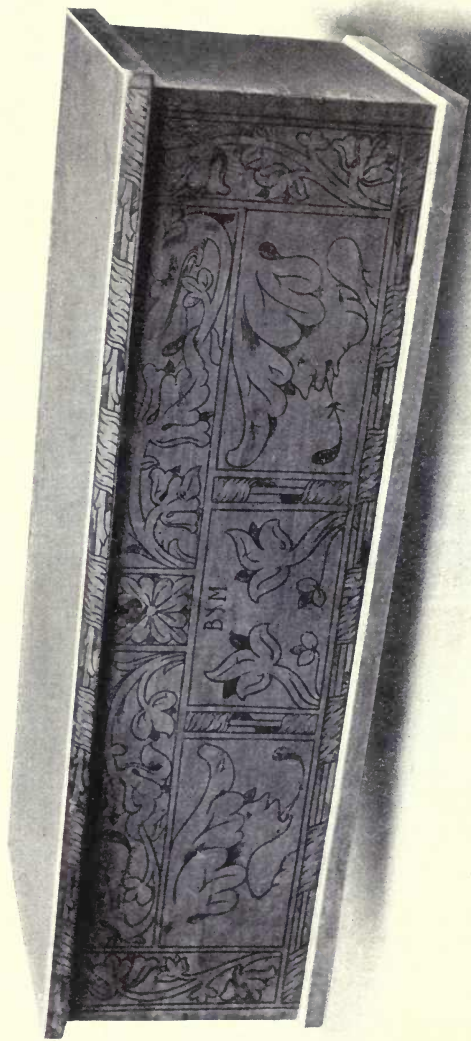
The other chest mentioned measures in length 2ft. 5in., its width is 1ft. 4½in., and depth 1ft. 3½in., and, although differing somewhat in several points of detail from the above described, bears an unmistakable family resemblance to it. I am unable to give a figure of this chest. It was formerly in my own possession, having come to me from my late father (the Rev. George Pickard-Cambridge, of Bloxworth House). He received it from John Trenchard, before mentioned, of Newton House, Sturminster Marshall (from whom also the one I have already described was received by

* In Gulland's work (above referred to) Vol. II., p.p. 271, 278, Fig. 488, a Chinese Porcelain Bowl in the possession of New College, Oxford, is described and figured under the name of "The Warham Bowl." This bowl is much smaller than the "Trenchard" one, and has a quite different silver-gilt setting from the "Trenchard Bowl." Whether this last or the Warham Bowl can claim to be the earliest known piece of Chinese Porcelain brought into England is uncertain. On this point Gulland says, p. 278, it is "a matter of opinion and fortunately of no consequence," to which I quite agree.

my father's brother, John Trenchard Trenchard, of Greenhill House, Weymouth). This second chest was afterwards sold by auction by my late brother (Colonel Jocelyn Pickard-Cambridge) at Weymouth, without my knowledge, and was subsequently presented by the Weymouth Town Council to the late Sir Richard Howard, by whom it was bequeathed at his decease to that same body, and is now in the Municipal Offices at Weymouth.

To pass on now to the Wooden chest, of which a photograph is exhibited; this is made of massive cedar wood; it measures 5ft. 9in. in length, 2ft. 1in. in width, and 1ft. 8in. in depth; and has its front side ornamented, as is well shown in the photograph, by bold Moorish engraved scroll-work. This chest came to my late father (the Rev. George Pickard-Cambridge), along with the second iron one above mentioned, from John Trenchard, of Newton House, and from my father it came to me, and in my possession it still remains. The tradition handed down with it is that it was one in which Philip and Joan brought their linen and such like effects to Wolfeton House, and was left there when they departed to the Court of Henry VII. My father being, I must confess, more moved by utilitarian than antiquarian ideas, simply made use of it as a *corn bin*. Since it came into my hands, however, it has been promoted to a higher sphere, and occupies an honoured position on a musical platform in my house, and contains much orchestral and other music, and such like.

Having now described those relics, whose descent from Philip and Joan are undoubted, I will only add a few words as to some other chests (both iron and wooden) which may possibly have the same source, but in respect to which there is not any clue or record, or history, that I have been able to ascertain. The first I will notice is an *iron chest* of a distinctly similar family character in the Guildhall at Weymouth, and which, so far as I have understood, has been there from time immemorial; but I have not succeeded in finding out whether or no the archives of the Guildhall contain any record relating



CEDAR CHEST.

to it. The next is an iron chest in the possession of Mr. C. S. Prideaux, of Dorchester, and another belonging to Mr. E. H. A. Mackley of Vermont, Dean Park, Bournemouth. Both of these, I understand, bear a close resemblance to the undoubted Philip and Joan chests ; but they are wanting in regard to any authentic record to connect them with the visit of Philip and Joan to Wolfeton. Respecting possible *wooden chests* in other hands, I was informed some time ago that there was in the possession of the landlord of the Bath Hotel, at Bournemouth, a chest which my informant told me was very like in appearance, if not identical, with the one in my possession above described ; but I have had no opportunity of verifying this, nor of hearing what is its history. Our President has also told me that he has himself a chest of somewhat similar character to that which I have described, but smaller ; and that it hails from an old Dorset house. It does not, however, appear to have any history attached to it. It may very possibly be a Philip and Joan relic, though lacking any known connection with the visit to Wolfeton.

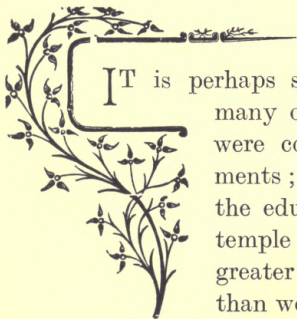
The account I have given of those relics to which there attaches an undoubted authenticity is, of course, of most interest to my family, who have directly descended from Sir Thomas Trenchard ; but it is also, I think, of real and great interest as a matter connected with the stirring English History of those days, and is thus well brought within the scope of our " Natural History and Antiquarian Field Club " Meetings and its " Proceedings."





Chained Books in Dorset and Elsewhere.

By the Rev. Canon J. M. J. FLETCHER, M.A. and R.D.



IT is perhaps scarcely to be wondered at that many of the earliest repositories of books were connected with religious establishments; partly because the priests were the educated class, but also because the temple and its precincts seemed to offer greater security for their safe custody than would be the case with the majority of secular buildings.

In Christian times, Community life naturally led to the gathering together of books; and, almost from the first, strict rules were promulgated for their use and preservation.

St. Benedict, who lived from about the year 480 until 543, may be regarded as the father of Western Monasticism. He was especially instrumental in encouraging the study of books; and the great Benedictine Order, which he founded in 529, and to which many of our English Monastic Communities belonged, or from which they were derived, enforced the habit of reading, and, as a consequence, led to the

production as well as to the preservation of books. The time of his monks was divided into periods of prayer, of mental study, and of manual labour. "Idleness," he wrote, in the 48th chapter of his rule, "is the enemy of the soul. Hence, brethren ought, at certain seasons, to occupy themselves with manual labour, and again at certain seasons with holy reading." From Easter until the end of September, they were to apply themselves to reading from the fourth until the sixth hour. From October until the beginning of Lent they were to study until the second hour. And during Lent they were to read until the third hour,—a book being then entrusted to them which they were to read straight through.

The labour bestowed upon the production of a book, when each copy must needs be carefully written by hand, together with the costliness of the material (vellum, or some other form of parchment) of which they were usually composed, apart from the value of the subject matter, or in some cases of the associations, would account for the care which was bestowed upon their safe custody. Sometimes it was an inflexible rule that no books were to be lent outside the Monastery at all. In other cases they might not be lent without the receipt of volumes of at least an equivalent value as a pledge. Occasionally a terrible imprecation was annexed against such as should remove a book without intending to return it, *e.g.*

"*Ut si quis eum (librum) de monasterio aliquo ingenio non rediturus abstraxerit, cum Juda proditore, Anna, et Caipha, portionem aeternae damnationis accipiat. Amen, amen. Fiat, fiat.*"

The use of chains was of course to ensure the safe custody of the volumes to which they were attached. The period during which books were chained, for more or less public study, may be said to have lasted from the early part of the thirteenth century until late in the eighteenth century. The first mention of chained books, so far as I am aware, dates back to the early part of the thirteenth century, when

* Roger L'Isle, Dean of York, "bestowed several exemplars of the Holy Bible to be used by the scholars of Oxford under a pledge; and these books, with others, were locked up in chests or chained upon desks in St. Mary's Chancel and Church, to be used by the Masters upon leave first obtained."

During the fourteenth and following centuries we constantly read of books being secured by chains at the Universities, as well as in Cathedrals and in parish churches. Indeed, at Oxford, there was an early statute which enacted that every book which was presented to the University Library should be chained within twelve days after it had been received.

By the statutes of my own College in Oxford (University College), which date back to 1292, it was enacted that "no fellow shall alienate, sell, pawn, hire, lett, or grant any House, Rent, Money, Book, or other Thing, without the consent of all the fellows." And, again, "Every Book of the House, now given, or hereafter to be given, shall have a high value set upon it when it is borrowed, in order that he that has it may be more fearful lest he lose it; and let it be lent by an Indenture, whereof one part is to be kept in the common Chest, and the other with him that has the Book; and let no Book belonging to the House be lent out of the College without a Pawn, better (than the book), and this with the consent of all the Fellows."

Both at Oxford and at Cambridge, the Statutes of the various Colleges contained most stringent regulations with regard to the custody of books. They were regarded as "the most precious treasure of scholars, concerning which there ought to be the most diligent care and forethought, lest they fall into decay or be lost." They were classed with the College Charters and Muniments. At Oriel, for example, books might be borrowed for a year by members of the foundation. But if any book was lost, the full value was to be paid. If the production or restitution of any volume was

* Roger de Insula (or De L'Isle) was Dean of York in 1221 and in 1226. He died in 1235. (*Le Neve.*)

wilfully deferred, or if it had been pawned or alienated, the culprit would, *ipso facto*, be deprived of his Fellowship and would cease to be a member of the Society.

There were, generally speaking, two classes of books ; those which were allowed to be taken away from the place where they were usually deposited—often a pledge being left as a guarantee for their safe return—and those which were allowed to be studied *in situ*, being secured in their place either by chains, or at least by strict regulations. Thus our modern system of combining a lending library with a reference department was anticipated.

Libraries, using the term in the sense of buildings for the repository of books, rather than that of mere collections of books, whether in connection with Monasteries, Universities, or Cathedrals, were for the most part built during the fifteenth century. At Oxford a room for the reception of books had been commenced as early as in 1320. It stood over a vaulted chamber in the N.E. corner of St. Mary's (the University Church). Books, however, do not appear to have been placed there until 1367. The Library was finally established and furnished in 1409.

In the building accounts of the Library at Exeter Cathedral in 1412-3, are charges for chains for 191 books, not secured before.

In 1418, some books were bequeathed to York Cathedral Library by the Treasurer, John de Newton, and were fastened to the Library desks ; and in 1421 Ralph Lorimer, of Conyngstrete, was paid 23s. 1d. for making and mending 40 chains for these books.

About the year 1444, when a special Library Room was erected at Salisbury to cover the Eastern Cloister, one of the Canons gave some books, on the inside cover of two of which, in the handwriting of the period, is a note bidding that they should be chained in the new library.

It was not only in Monastic and University or in Cathedral Libraries that books were carefully preserved ; but within the Cathedrals themselves and in other Churches they were

to be found, kept for the use of readers ; primarily, perhaps for the studies of the clergy ; for the ordinary layman, or laywoman, was in those days, as a rule, deficient in learning, and consequently unable to make use of books.

It has already been pointed out that, early in the thirteenth century, books were chained, for the benefit of students, in St. Mary's Church, Oxford, and that this was the commencement of the University Library ; but, nearly two centuries after the Library had found a permanent home of its own, we read that

In 1414 a copy of Nicholas de Lyra was chained in the Chancel of St. Mary's Church for public use, where it was inspected by the Chancellor and Proctors every year.

Nearly a century previously, in 1327, a Breviary and Missal had been chained up in the Choir of Exeter Cathedral for the use of the people.

In 1365 books were left by Bishop Charleton to be chained at Hereford.

In 1389, at the altar of St. Thomas the Martyr, in Salisbury Cathedral, were chained Psalters and the Liber Matutinalis.

Attached to St. Hugh's shrine at Lincoln, there was "a booke of seint Hugh's life cheyned, and a book of sermons."

In 1472 St. Edmund's, Salisbury, has "ij Legendes, Hugucion y chayned in our lady chapell."

There is an interesting mediæval inventory at St. Margaret's, New Fish Street, London, in which some considerable number of the books belonging to the Church are mentioned as being "cheyned."

There is an erroneous impression that in pre-Reformation times the Bible was practically a closed book. The following extracts tend to show that, if this was the case, it was only so because many were unable to read, or were ignorant of the Latin tongue :—

In 1369 Bishop Charleton left a Bible, a Concordance, a Glossary, Nicholas de Lyra, and five Books of Moses, all to be chained in Hereford Cathedral.

In the time of Richard II. (1377—1399), in the Royal Collegiate Chapel of Windsor Castle, were 34 books on different subjects, chained. Amongst them were a Bible and a Concordance.

In 1378 Thomas de Farnylaw, Chancellor of York, left, amongst other books, a Bible and a Concordance to be chained in the north porch of St. Nicholas Church, Newcastle, "for common use."

In 1394 a copy of the Gospels in English was left by a chaplain to Holy Trinity Church, Goodramgate, York.

In 1407, amongst other books to be found in St. Mary's Church, Warwick, at the Earl of Warwick's Altar, was a Bible.

In 1491 the parson of St. James', Colchester, wills "that my portuse (breviary) and all my bookys that be bounde, that they be chayned in saint peter's chappell by the byble."

In 1498, in the book inventory, to be found in the wardens' accounts of Bassingbourn, Cambs., is Sir John Hubbertes gift, "the bybull."

In 1506 a Bible in 3 vols., a Lyra in 3 vols., and a Concordance were chained behind the Treasurer's Stall in Exeter Cathedral.

Commentaries on various books of Holy Scripture are also frequently mentioned as having been chained in Cathedrals and other Churches.

Towards the close of the fifteenth century, about the time of the invention of printing, many of the College Libraries suffered loss. Books, worn out, were not replaced. Pledges were not always redeemed, and many volumes were permanently alienated. Others were sold or given away by those who had no right to do so. At Exeter College, in 1458, the reason given for books being chained was that some of them had been taken away.

But worse times were to follow. The suppression of the Monasteries involved the destruction of the Monastic Libraries. In three years, 1536-1539, the whole system was

swept away ; 2,000 Monasteries came to an end. The buildings were pulled down. The books were burnt, or used for such purposes as the scouring of candlesticks, or the rubbing of boots. Others went to the grocers or soapsellers for the wrapping up of parcels, or were cut up by the bookbinders as materials for their trade.

The Universities were not spared. The Commissioners of Edward VI., in 1549, considered that they were empowered to reform the Libraries as well as those who used them. Any illuminated MS., even if it had nothing more superstitious about it than a few rubricated initials,—or a mathematical treatise, if it was illustrated with diagrams,—was doomed to destruction. At Oxford, of the numerous MSS. of which it had formerly been the possessor, 600 of the most important of which had at one time been the collection of Humphrey, Duke of Gloucester,—not a theologian, but a cultured layman,—three only now remain.

Henceforth, as new libraries were formed, or some few of the old ones restored, printed books for the most part took the place of MSS. ; but the old conditions to a certain extent were continued, and for two centuries longer many volumes were chained.

The following notices with regard to chaining, and the abolition of chains, at the Bodleian Library, Oxford, during this period, will be of interest :—

A letter, dated 7th Feb., 1643, was written by the Marquis of Hertford, at that time Chancellor of the University, to the Curators of the Library, complaining that many of the books were not properly chained. In reply, the Curators replied that they had ordered to be done all that he required.

At the surrender of Oxford, after its siege, in 1646, General Fairfax set a good guard of soldiers to preserve the Bodleian. “ ’Tis said there was more hurt donne by the Cavaliers (during their garrison) by way of embezzilling and cutting off chains of bookes than there was since.”

About 8,000 volumes were added to the Library by Mr. Selden’s gift. A condition imposed by the executors

stipulated that within 12 months the books should be placed, and chained, and a catalogue made. Accordingly, in the accounts for 1660 there is an entry of the cost of providing chains for these books,—£25 10s.

In 1751, additional chains were provided for the Library.

The removal of the chains commenced in 1757. And, in 1761, there was a payment made for unchaining 1448 books at one half penny each.

In 1769, some long chains were sold at 2d. each, and short ones at 1½d. each. And then, *en masse*, 19 cwt. of old iron was sold at 14s. per cwt.

Several of the chains are still preserved as relics.

CHURCH BOOKS IN BYGONE DAYS IN WIMBORNE MINSTER.

Of the following items, the first refers to a bequest to Wimborne Minster, the others are extracts from the Churchwardens' Account Books of that parish, which are almost complete from the year 1475.

Walter Hoggis, clerk, of Abbots Ann, Hants, in addition to other bequests, including £10 for the erection of a library at Hyde Abbey, Winchester, left by will, dated 10 Apr., 1488, and proved 5 May, 1490 (P.C.C., Milles, fo. 35), "to the King's church of Wimborne one book which is called 'Sermons of a pupil' to be placed in some suitable place there."

1495 (goods of the church), "Et l missale ex don' deca'i m'g'i Walt's (*sic*) hart." [*i.e.*, one missal, the gift of the Dean, Mr. Walter Hart].

1510. Itm a payr of testymentys of the coste of Alys Pep.

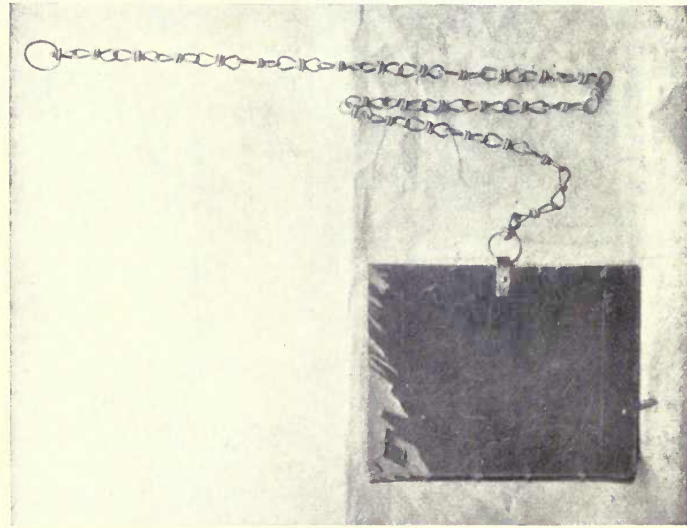
1529. Payd for a prynt legend [probably a printed copy of the story of Saint Cuthburga, the Foundress of the church (circ. 705)]. xs. iiijd.

1538. payd ffor a new legend of the store of Seynt Cuthborow vjs. viijd.

1539. Itm payd ffor halff a new byble vijs. vjd.

This would probably be "Matthew's" Bible, published in 1537, which Cranmer had ordered, in 1538, to be supplied everywhere in churches. It was to be provided by the clergy and churchwardens conjointly. In accordance with this order, doubtless the other half of the cost was paid by the Dean and Canons, &c., who then ministered at Wimborne.

1540. Itm payd ffor a new manvell boke for the Church
ijs. iiij*d*.
1542. Itm payd ffor a deske and a cheyn ffor the bybyll,
and mending of a tressell in the markett and nayls
xiiij*d*.
1547. Itm pd for a bybyll xvjs.
1547. Itm pd for a manuell xvii*j**d*.
1549. Itm pd for a parafrasse & a chayne to make hem
faste xls.
- 1564-5. Itm Rec. for the olde Byble
- 1565-6. Itm payde for ij books of p'yers for envadinge of
the Turke xij*d*.
- 1566-7. Itm pd for ij Comunyon books . . . xls.
- 1567-8. Itm pd for a byble xxvs. vid.
- 1568-9. Itm payed for a newe byble (probably the Bishop's
Bible) xxxiijs.
- 1588-9. Item paied for a new Bible xxxiijs. iiij*d*.
1604. Recd for the ould Bible iijs.
1613. Itm for the Church Bible (no doubt the "Authorised"
Version) lvjs.
- Item for a horse for Mr. Wayne and another for
Henry Allen to Dorchester for the bible and there
dinners. iijs.
1614. Itm for B. Jewels Booke £1 4*s*. 0*d*.
- Itm a chaine for B. Jewels Booke 9*d*.
- Itm for makinge a dext (desk) for B. Jewels
Booke 1*s*. 0*d*.
- Itm (Received) of Chichester Shepton for a rome
(room) under B. Jewel's booke. [i.e., a seat.
The "sittings" were life holdings, and after the



Chain and Book in Wimborne Minster Library.



Bishop Jewel's works. Formerly chained in
Wimborne Minster, 1614.

	death of the occupant reverted to "the Church."	1s. 2d.
1617-8.	It. for a book of Com'on praier . . .	viiijs.
1645-6.	For new binding ye Com'union book .	0.01.10.
	For a Directorie . . .	0.02.00.

The "Directorie for the Public Worship of God" was a Presbyterian formulary put forth by the Assembly of Puritan Divines, and enforced on the nation by Parliament. Every parish was bound to purchase this book, and anyone who was discovered to be using the Book of Common Prayer, publicly or privately, was fined £5 for the first offence, £10 for the second, and imprisonment and loss of all goods for the third.

Bishop Jewel's Works would probably have been removed during the Commonwealth. Immediately after the Restoration of the Monarchy, we find

1659-60.	It. For fitting the Booke called Bishop Jewells works & Chaine & a staple	0.02.00.
	It. for making the Deske for Bishop Jewells booke	00.10.00.
1660-1.	It. payd for 2 Comon prayer Bookes. .	1.01. 0.
1685-6.	pd for binding the Church bible	00.11.00.
	pd ffor A Book of Homilies	00.08.00.
	pd for the Book of Canons & the 39 Articles	00.02.00.
1691.	pd Mr. ffurber for 3 new Common Prayer Bookes	01.37.00.

With each new reign new Prayer Books were bought :—

1701-2.	pd for 2 new Common Prayer Books. .	1. 4. 0.
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The books most frequently found chained at the present day in churches are the following :—

The Bible, which is sometimes bound up with the Book of Common Prayer.

Erasmus' Paraphrase of the New Testament.

Jewel's Apology, and Defence of the Apology.

Foxe's Book of Martyrs.

The Whole Duty of Man.

The Book of Homilies.

Comber's Companion to the Temple.

An Order of Thomas Cromwell's to provide *Bibles* in Churches was inserted in the Injunctions of 1536. In 1538 Cranmer ordered that Matthew's Bible should be supplied everywhere in Churches. And on July 31, 1547, there was an Injunction of Edward VI. put forth which ordered that each parish should "provide within three moneths one Boke of the whole Bible of largest volume in English (*i.e.*, the Great Bible which had been published in 1539) . . . the same to be sette upp in some convenient place within the Churche." At the same time it was ordered that a translation of *Erasmus' Paraphrase on the New Testament* should "within one twelvemonth" be set up in all Churches. This was repeated in 1559.

In 1571, after the death of Bishop Jewel (of Salisbury), Archbishop Parker wrote commending his *Defence of the Apology*, and urging that it should be placed in Parish Churches where it had not been already procured. And in 1609 Archbishop Bancroft ordered that Jewel's collected works should be placed in Churches in addition to Erasmus' Paraphrase.

In 1571 Archbishop Parker had ordered that Foxe's *Book of Martyrs* should be placed "in the common halls of Archbishops, Bishops, Deans, Archdeacons, and Heads of Colleges," &c. And in 1684 the publishers of a new edition obtained a promise from King Charles II. that Parker's order should be revived.

The Whole Duty of Man was published soon after the Restoration. Its authorship is unknown. It attained an elevation only next to the Bible and the Book of Common Prayer. It was recommended by Bishops to be used instead of sermons, and young clergymen were advised to persuade every family in their parishes to read it three times a year.

It will be noticed from what has been said that, although it was ordered that some of these volumes were to be set up in

the Churches and others were placed there because they were thought likely to be helpful, yet there were no directions given that any of them should be chained. This was done for the sake of securing them.

Lists of Churches and other buildings which are in possession of Chained Libraries and Chained Books have been given in *Notes and Queries*, *Blades' Books in Chains*, Dr. Cox's *Church Furniture* (Antiquary's series), c.f. also Clark's *The Care of Books*. Excepting for the short notes immediately following, the remainder of this paper deals only with Dorset Church Libraries and Books.

No English Chained Library now in existence can be compared for a moment in interest or in value with the Cathedral Library at Hereford. The building on the site of the old western cloister is modern (1897). In the upper chamber are the old volumes. Originally they numbered 2,000, all chained. Now there are 200 MSS., in the original book cases, chained ; besides a large number of early-printed books also in chains. Amongst the treasures of the Library are an ancient copy of the Gospels, which is probably more than 1,000 years old ; a 13th century copy of the " Hereford Use ; " a copy of the " Bangor Use," written about the year 1400, with a curious charm for toothache inserted in the middle of the book ; a first edition of Caxton's *Golden Legend*, 1483 ; and a considerable number of Incunabula, or 15th century printed books. It is perhaps unnecessary to state that, preserved at Hereford, in the east aisle of the choir (though of course not chained in the Library), is the celebrated 11th century *Mappa Mundi*.

In 1715 a collection of some 280 chained books was bequeathed to the churchwardens of All Saints' Church, Hereford, and their successors, for the use of the rectors or vicars, by Dr. Wm. Brewster. In 1858, when a bookseller named Head was warden, and the church was in need of money, the entire collection was disposed of to a London firm of booksellers for £100, and narrowly escaped shipment to

America. But the Bishop, hearing of what had been done, interfered ; and after some delay, and the payment of the purchaser's expenses, books and chains were returned from London and restored to their original position in the vestry.

At Minster in Thanet (Kent) for many years past the boards alone of a Bible have been chained, every page of the Volume of which at one time they were the covers having been carried away and, presumably, appropriated by trippers.

At Whitchurch, Little Stanmore, Middlesex, the Earl of Carnarvon, afterwards Duke of Chandos, rebuilt the church in 1715, and had two copies of the Book of Common Prayer chained to the book rests in each pew by means of iron chains about 10 inches in length. Some of the chains still remain *in situ* ; but only a few of the books are left, and these in a very imperfect condition.

In the Minutes of S.P.C.K. for June 16th, 1707, occurs the following :—" Mr. Skeat moved that a large decent Bible might be bought for the Use of the Prisoners in the Compter-Prison in Southwark.

" Agreed to the said Motion and that the Whole Duty of Man, the Art of Catechising, the Xtian Monitor, and Dr. Gibson's Family Devotion (the last three to be bound together) be added thereunto and all to be chained in that Prison."

The Calendar of Treasury Books and Papers (1739-41, p. 18) gives warrant (3 April, 1739) for delivery at a cost of £13 of a folio Bible, folio Book of Common Prayer, and Baker's Chronicle, with iron chains and pins to chain them to the reading desk in the Guard Chamber at St. James' for the use of the Yeomen of the Guard.

Blades (Bibliog. Miscel., 1890, pt. 2, p. 6) states that at Wimborne " a copy of Fox's Book of Martyrs was in bygone days chained to a desk in the *dissenting chapel*," cf. also Hutchins' Hist. Dorset (last Edn. Vol. III., p. 229). Nothing, however, is now known of this.





Chained Library at Wimborne Minster, 1686. *pp.* 21-24.

CHURCH LIBRARIES (CHAINED AND UNCHAINED) AND
CHAINED BOOKS, &c., IN THE COUNTY OF DORSET.

At GILLINGHAM is a collection of 300 books, unchained, which still remain of the 619 volumes left to the vicar and feoffees of the parish lands of Gillingham, in 1718, under the will of Thomas Freke of Gillingham. They consist for the most part of theological works, and are now at the Vicarage.

At KINSON about 220 volumes were given to the Church in 1895 by Rev. P. J. Newell, then a resident of the parish. They are shelved at the west end of the Church.

At MILTON ABBAS is one of the two Dorset Chained Libraries. It consists of 66 volumes, for the most part theological, which were originally kept in the vestry; but many years ago they were removed to the Vicarage, where they now are. A marble tablet, in the vestry at the Abbey, records the fact that John Tregonwell, Esq., who died in 1680, "by his last will and testament gave all the bookes within the vestry to the use of the Abbey Church for ever, as a thankful acknowledgment of God's wonderful mercy in his preservation when he fell from the top of this Church." The incident happened when he was five years of age. Accompanied by his nurse, he was on the roof of the south transept, and, when her attention was otherwise engaged, he clambered on to the parapet, attracted by some wild flower which was growing out of the wall, and, losing his balance, he fell 60 feet to the ground. The skirts of his dress becoming inflated acted as a parachute and broke his fall. When the nurse reached the ground, to her astonishment and relief, she found the child unhurt and picking daisies.*

But most celebrated of all the Dorset Libraries is the far-famed Chained Library at WIMBORNE MINSTER. It was founded by the Rev. Wm. Stone in 1686. Stone was a native of Wimborne, and was born about the year 1615.

* Proceedings of the Dorset Field Club, Vol. IV., pp. 86-87.

Presumably he was the son of another William Stone, who like himself, was one of the three "Ministers," or "Presbyters," who conjointly were in charge of the Minster at Wimborne. He took the degree of B.C.L. when 18 years of age, and was appointed one of the Ministers of Wimborne in 1641. During the Civil War he appears to have attached himself as Chaplain to the Royal Army, "where through many labours, losses, and dangers he strenuously fulfilled his duty." During the period of the Commonwealth he travelled in foreign lands. Upon the Restoration he returned to Wimborne, and in 1661 was restored to his position as one of the Ministers of the Minster. Two years later he became Principal of New Inn Hall, Oxford. The remainder of his life he spent partly in academical work at the University, partly in ministerial work at Wimborne. He died in Oxford in July, 1685, in the 70th year of his age, and was buried at St. Michael's Church, where his monumental tablet still remains, though it has been removed from its original place in the chancel to a position at the west end of the church.

Stone was not unmindful of the poor at both places of his residence. At Oxford he founded the almshouses at St. Clements. And by Will, bearing date 12th May, 1685, he left all his lands, tenements, houses, and reversions, within the parish of Wimborne, for the benefit, after the death of his brothers and sisters, of the almsmen who should live in the hospital of Saint Margaret's (the old leper hospital of St. Margaret and St. Anthony, whose 13th century chapel still remains).

He left his books to Wimborne Minster. For the most part they are theological; though there are also some volumes dealing with historical, scientific, or more general subjects. They may be described as a collection such as would form the library of the Head of one of the smaller Colleges in Oxford in the 17th Century.

The following extracts from the Wimborne Minster Churchwardens' Account Books refer, the two first to the time of

Stone's restoration to his office as "Minister" of Wimborne ;
the others to the formation of the Library :—

	£	s.	d.
1660-61. It. payd for a hoode for Mr. Stone . . .	1	06	05
Memorand' that the new Table bord wh stood in ye Quire is left at Mr. Stone's house. [Probably this was the table round which the Communicants sat during the time when the Independents were in power. There is a payment recorded in 1655 for the benches used for their seats. Upon three of these the houselling cloths are now placed.]			
1685-86. Disbursements :—			
Payd Dennis Smith for one hundred of Deal boards for ye Library . . .	06	15	00
Payd the porters for Lading them . . .	00	02	08
Payd for bringing them home from Poole . . .	00	10	00
Payd for carrying them into Church . . .	00	00	10
Pd Rich. Morris and John Gill for slitting Deal and doing other work . . .	00	16	06
Payd Edward Alles for Iron work about the Library & other Ironwork about the Church, &c.	03	08	03
Pd Jno Mackrill for Leths for the Library & carriage of lead to ye Church . . .	00	01	00
pd for bringing the bookes from Oxford as by bill apeareth	02	04	04
pd for bringing the books from the Caryer to the Church	00	02	06
pd Samuell Pitman for brick lime hair and work- manship about the Library . . .	05	13	00
pd for cleaning the library 4 times . . .	00	01	00
pd John Mackrill for timber and work about the Library	05	05	09
pd John Purches for work about the Library, boards under the leads, and other work about the Church	08	15	06
pd to Mr. Lloyd for money disbursed by him at Oxford for boxes and nailing for the bookes	00	15	00

Some additions were made to the Library by Roger Gillingham, of the Middle Temple, a native of Cowgrove, Wimborne, who, by a codicil to his will, dated 2nd July, 1695, "gave for the use of the newly erected library of Wimborne Minster various books in the said codicil particularly stated to have been bought for the purpose (including, amongst others, the Polyglott Bible and Lexicon), and also such of his best books to the value of £10 (not being law books) as were fitted for the use not only of the clergy but of the gentry, shopkeepers, and better sort of inhabitants in and about the said town, but not to be delivered until the books, already given to the said library by Mr. William Stone and others, should be chained in their places as usual in public libraries, and until chains and places should be provided for the books already given, for which purpose he gave £10 to the churchwardens of the said church."

A MS. catalogue of the books, made in 1725, is still in existence. They were again catalogued in 1863 by Mr. W. G. Wilkinson, an under-master of the Grammar School, and again in 1890 by William Blades.

Amongst the treasures of the Minster Library are

(1) A MS. dated 1343, entitled "Regimen Animarum,"—a book of directions for priests in dealing with souls. And

(2) An "Incunabulum," (or book printed before the year 1500). It is a "black letter" copy of some Tractates of St. Anselm, dated 1473.

Grimston's History of the Netherlands contains the autograph of "Sir Walter Rawly."

William Blades (Books in Chains), writing in 1890, states that there are seventeen volumes which are not in the British Museum. This statement, however, is hardly correct now; though there are, so far as one can judge, eight books, or editions, which the British Museum Library does not possess.

Besides these two Chained Libraries, there are also in the County of Dorset Chained Books at

IBBERTON, where the chained Book of Homilies, dated 1673, was examined by the members of the Field Club at their meeting on Sept. 16th, 1913.

LYME REGIS, which possesses two chained volumes—(a) a quarto black letter Geneva version of the Bible, dated 1615, bound up with the Book of Common Prayer, dated 1637, and (b) a black letter copy of Erasmus' Paraphrase of the four Gospels, in which is the MS. note "This Book pertaineth to Lyme Regis 1599." For a time these books were lost; but they were discovered in London and restored to the Church, where they are now chained to their original lectern.

LYTCHET MINSTER, where the Whole Duty of Man, with chain affixed, may be seen in a glass-fronted case near the vestry door. Both chain and book were formerly in the vestry detached, though the book had evidently previously had a chain affixed. [The church, with the exception of the tower, was entirely rebuilt in 1833-4.]

SPETISBURY. Here a copy of Jewel's Defence of the Apology and other works (in black letter), dated 1631, was removed from the church chest, in 1856, by the Rector, Mr. Vizard, and was fastened to the bolt in the pillar on the north side of the chancel arch, which, according to tradition, was originally intended for the purpose.

STRATTON (CHARMINSTER), which possesses a copy of Jewel's Apology, the date of which is about 1615. It was formerly chained to an open reading desk. It was repaired in 1890, and is now enclosed under glass.

STUDLAND, where a copy of the Life of Bishop Smythies of the Universities Mission to Central Africa is chained to the desk in the chancel, at the place where, as a boy, he used to worship when his father was Vicar of the parish.

WIMBORNE MINSTER. Amongst the books in the "chained Library" is a dilapidated copy of Bishop Jewel's works (which it is intended before long to have repaired). But the chain is of a very different pattern from those affixed to all the other volumes in the Library. And,

moreover, it is fastened to the top edge of one of the boards, instead of to the middle of the outer edge. MSS. notes of baptisms, too, on some of the margins seem to prove that it was at one time in the Church. There can be but little doubt that this is the identical "B Jewel's booke" alluded to above, which the Church accounts show was purchased and chained to a desk in the Minster in 1614.

There are those still alive who can remember two books, a Bible and Prayer Book, and the Whole Duty of Man (dated 1702), chained to a desk in the Trinity Chapel at Wimborne Minster. Shortly before the restoration of 1855-7 they were removed to the (Chained) Library, where they are deposited in the glass case in the centre of the room. The following extract from the will of William Fitch, Esq., of High Hall, dated 24th Feb., 1740, and proved 12th Dec., 1743 (P.C.C., Boycott 359) relates to them :—

"I desire a long reading desk may be fixt over the (Family) Vault in Wombourne (*sic*), and that the Bible, the whole duty of man, Mr. Nelson's ffeasts and Fasts, and Doctor Sherlock's Book concerning Death and the immortality of the soul be chained to ly on the said desk."

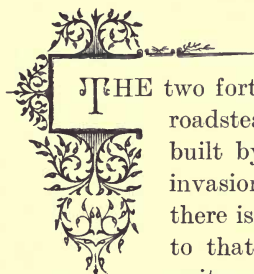
And so we conclude with the thought of this good man, whose devotional companions these books had been during his life, bequeathing them to the church in which he had been accustomed to worship, with the desire that after his life on earth was over they might be helpful to the souls of his fellow parishioners.





Sandsfoot and Portland Castles.

By HENRY SYMONDS, F.S.A.



THE two fortresses which face each other across the roadstead of Portland are said to have been built by Henry VIII. as a protection against invasion from the Channel, and although there is no reason for doubting the statements to that effect made by Hutchins and other writers, I have been unable to find any trace of an order to build, or any account of the expenditure incurred when the castles were erected. There is, however, a recital hidden away in an Act of Parliament of 1540, entitled "A bill for the subsidy," which touches upon the subject. Among the reasons for the additional taxation imposed by that Act was the cost of building and arming many castles for the defence of the Kingdom, one of those being the "bulwark at Portland," and it is said that ten thousand men had been employed upon the various works.

The two structures in question have always been the property of the Crown, who appointed a governor, or "captain," from time to time, and repaired the walls, &c., out of the public funds of the Exchequer. The details of

these renewals have survived in some instances, and shed a certain amount of light upon the methods of construction and the varieties of armament in a coast fort of the Tudor and Stuart periods.* The "new" castle of Portland was no doubt a few years earlier in date than its neighbour, Sandsfoot, and it differed from the latter in design ; but both strongholds were from the beginning threatened by a common danger, viz., encroachments by the sea. Apparently Portland was thought to be more worthy of preservation, as it is to-day almost unchanged in its main features, and is occupied as a dwellinghouse by an officer of the garrison ; whereas Sandsfoot is a picturesque ruin, with the southern portion of its fabric lying upon the beach below the cliff on which it formerly stood.

At the time of the Armada, Portland was held by one hundred foot soldiers in addition to the gunners, the garrison of Sandsfoot being fifty *plus* the artillerymen ; but nevertheless it would seem that the inhabitants of the district were alarmed at the prospect, for they say in a letter of 1586 that the Spaniards could land near Weymouth or Portland and that her Majesty's two castles could not reach them with a single shot. (Dom. State Papers.)

I have arranged the available information in chronological order and in separate chapters, for convenience of reference. The names of the officers of both castles are almost invariably those of families connected with this county, and it is not unlikely that the men, too, were locally recruited.

SANDSFOOT, OR WEYMOUTH, CASTLE.

The earliest mention of this castle which has come under my notice is in 1541, when Maurice Rede was appointed for

* The eastward shore of Dorset was guarded by Brownsea Castle, also built by Henry VIII., and by small forts or gun platforms at Handfast Point and Peverel Point in Elizabethan times, but historical facts are even more scanty with regard to those defences.

life to the office of gunner (*vibrellator*) in the "house commonly known as the blockhouse of Weymouth," at a fee of 6d. the day (Patent rolls, 33 Henry VIII., part 3). This grant may serve to date approximately the completion of the building, as an official list of the King's fortresses in 1540 includes Portland but is silent as to the Weymouth blockhouse, from which it can be inferred that the latter was at all events unfinished in that year.

In June, 1545, Philip Bonde, then master-gunner of Sandefote Castle, was to receive one last, *i.e.* twenty-four barrels, of serpentine powder, to be equally divided between that place and Portland (*cf.* Acts of the Privy Council). This is perhaps the first recorded instance of the use of the name by which we now know the ruins.

During the reign of Edward VI., John Wadham (of Catherstone) is mentioned in the Privy Council MSS. of 1550 as being the Captain of Sandsfoot, and two years later he is instructed to dispense with the services of one of the five gunners then on duty in the Castle; this was presumably from motives of economy, as a similar order was addressed to Portland.

About thirty years later, a comparatively short period, some of the external masonry and other portions of this fort already needed reconstruction, not, indeed, from battering by enemies, but from the wash of the tides. After the damage had been made good, Sir George Trenchard sent to the Exchequer an account of the work done there between 1584 and 1586, from which I have briefly abstracted a few items—

New making two platforms, viz., the lower and higher keeps, £116 8s. 3d.

Making 4 lead pipes within and one without the barbican, and other pipes for the upper platform and the gatehouse.

Filling up the great gulf which was wrought by the sea on the east side of the castle, and building a wall of ashlar upon the same, in height 22ft. and in length 60ft.

Repairing the gate of the outer ward.

New making the vaults, being wholly decayed and sunk into the sea. Making 33 feet of stone gutters and a new bridge at the outer gate. Repairing the stable and setting it upright.

Repairing the upper platform, of which certain principals of timber and lead were "rent and broken by violence of a culveringe of brass which brake, being shott and discharged in tyme of an occasion of service."

Supplying bars and cramps to support the lead work set over the Queen's Majesty's arms. [This probably refers to the royal arms worked in stone, now fixed in the chancel of Wyke church, having been brought from Sandsfoot in 1825. The armorial coat would be that of Elizabeth.] George Awdeney, "freemason," for taking down part of the hall chimney and rebuilding it with a top piece cut and wrought in divers vents thereby to convey the smoke, which otherwise at all winds was very noisome.

Masons, plumbers, tilers, smiths, and carpenters were paid 12d. the day, the total expenditure on repairs being £383 0s. 2d.

The outlay upon the weapons in the same years included axle trees and wheels for the great ordnance; nocking and trimming 40 bows at 8d. each; feathering 20 sheafs of arrows at 16d. each; leather bags for powder, and sheepskins for sponges for the ordnance. (P.R.O. Declared acc'ts. Pipe office, 3570.)

In 1594 Sir Geo. Trenchard and Wm. Bampfield received a joint grant of the office of Captain, with 12d. the day for themselves and 18d. for three soldiers. It will be noticed that the captain's pay is the same as that of the artificers previously mentioned. (S.P. Dom. Elizabeth, Vol. 249.) No other repairs were carried out during Elizabeth's reign, but in 1602 the Queen asked for a special return as to the number of brass ordnance throughout the country; the list shows that Sandsfoot possessed one culverin and one demi-culverin of that metal.

During the two years 1610-11 Sir George Bampfield, the captain, expended £211 5s. 6d. on reconstructive work and a few additions, which included the following items—

Pulling down a ruined wall, laying a foundation 60ft. long, 6ft. deep, and 10ft. thick, and rebuilding the old wall 15ft. above the foundations. The carriage of "400 tons of filling stuff" cost £20.

Making with ashlar stone the wall and parapet of a new platform and laying paving stones there.

Putting new ashlar in the most defective places of the castle.

Providing iron casements and glass, lead for the roof, tiles for the stable, and timber for the lower platform and the bridge. The cost altogether = £211 5s. 6d. (Declared acc'ts. Pipe office, 3582.)

We now reach a comprehensive report as to the condition of this "bulwark" and its readiness for war. In the year 1623 James I. instructed Sir Richard Morryson and two other officers to make an exact survey of all the royal fortifications on the Thames and Medway, and from thence along the south coast as far as Land's End. The recommendations clearly indicate that Weymouth Castle was again in peril from subsidence, notwithstanding all that had been done some twelve years earlier. An abbreviated statement of the result of the inspection is here quoted—

"The Institution."

Sir Wm. Bamfield; the reversioner being Sir Wm. Trenchard.

Thos. Pawlett, lieutenant, 9d. *per diem*.

Bryan Yates, porter, 8d. Richard Champignon, master gunner, 8d. Henry Haider, Andrew Pitt, Wm. Cumphyne and Nicholas Eyles, gunners, 6d. The captain's three men, 6d.

Iron ordnance, serviceable, 10, viz., 1 culverin, 5 demi-culverins, 2 sakers, 1 minion, 1 fawcon.

225 round shot of iron. 50lbs. musket shot. Powder and match. 9 ladles, complete (used for drawing the charge of a gun). Black bills. Crowes. Cressetts unstaved. 20 pairs heads and rammers. 3 chain shot.

Unserviceable ordnance, &c.

"Calyvers with croked stocks." 1 saker, valued at 16. 16. 0. Short and long pikes. Flasks and touch boxes with strings. Two demi-culverin carriages to be cut shorter.

Reparations. In this castle (Sandsfoot) the middle square tower is covered with lead, with a platform upon the same, the fourth part being quite decayed. The leaks are to be repaired and covered with boards pitched and strewed with shell sand. The platform being out of use, and to prevent the charge of mending, is to be removed for better service upon the lower battery which had been left unfinished by one Gibbons.

All things else concerning the house are in very good repair.

At the lower battery upon the water, one corner thereof the water hath undermined. The wall is of free stone very sufficiently built against the water towards the east and would be very convenient

towards the west with a like wall 30 feet high, four and a half rods long (which makes nine rods of wall), 10ft. thick at the bottom and wrought with Portland stone, at £30 18s. 0d. a rod. This wall will prevent the undermining of this corner of the battery and "it were needful that it were looked unto in time" because the water daily undermines and eats away the ground. By estimation the cost of the wall is £278 2s. 0d.

There is round about this fort a rampier with two points, bullwarks, enclosed with a dry overgrown moat. To make the moat deeper and proportion the rampier with a parapet upon the same, as formerly intended, which parapet is in length 47 rods at 42s. the rod, with cleansing the moat; and a single parapet without the rampier towards the water is about 15 rods at 13s. Total £108 9s. 0d.

The coming in of the fort wants a palisado; the porch of brick is ruined and uncovered, it must be arched and the main body of the same vaulted, so that one may go over the vault from one rampier to the other; and in the same a portcullis should be placed, with a roof on the top which may be used for an outward court of guard, together with three sentinel houses about the walls. £57.

The whole charge by an estimate of the engineers will amount to £459 1s. (Harleian MSS. 1326.)

We may assume that the renewals and additions mentioned in this survey of 1623 were duly carried into effect, because the castle proved itself to be a defensible fortress at the time of the Civil War, when it was held for the King from August, 1643, to June, 1644. I believe that during this latter period a Royalist mint was in operation within the walls of Sandsfoot (*Numismatic Chronicle* 4 S., Vol. XIII., p. 119).

Until after the restoration of the Monarchy there is little to be recorded, though the structure doubtless received many hard knocks in the course of the protracted warfare. The Domestic State Papers of Charles II. show that there was a close association between the parishioners of Wyke Regis and the neighbouring castle on the edge of the cliff, an association which had existed at all events during the reign of Charles I. and probably at an earlier date.

In 1661 (?) I find an order to the Sheriff of Dorset that the soldiers kept for the garrison of Sandsfoot should be disbanded within four days and the arms taken in charge. This was followed, in 1664, by a protest from the inhabitants

of Wyke against the removal of the troops from the castle, which had defended the country from foreign ships and had been a place of security. Humphrey Weld, who was captain during the last mentioned year, then presented a petition alleging that the Duke of Richmond, as Lord-Lieutenant, had fined the men of Wyke who were the King's immediate tenants, and, as such, bound to furnish arms and constant service for the defence of Sandsfoot; that these men were therefore exempt from duties incident to the rest of the Dorset militia; that the Duke's agents had taken possession of the castle, and that he (Weld) had been deposed from his deputy-lieutenancy.

This petition was referred to the Duke of Albemarle and other statesmen, who reported on 13th January, 1664-5, after having heard the evidence of both parties, that Sandsfoot should be demolished as being unserviceable to the King; that the sixteen men (of Wyke) then bound to defend the Castle should be transferred to the militia to serve with that body; and that Weld should be restored to the dignity of which he had been deprived. (S.P. Dom. Charles II., Vols. 47, 90, and 106.)

As a matter of fact, the Castle was not "slighted," a contemporary euphemism for deliberate destruction, but it would seem that the report of 1664-5 fixes the period after which no attempt was made to preserve the building, although it was used as a store house for arms as late as 1691. At an unknown date before 1725 the Tudor "blockhouse" had become a ruin, as is proved by a note upon a map of Portland Castle to be presently mentioned.

I believe that no picture exists which represents Sandsfoot before it fell into decay. It is true that Delamotte's Guide to Weymouth (2nd Ed., 1789) contains a ground plan showing the "barbican," a gun platform with a pentagonal front, which faced the sea at the southern end of the main rectangular building. Whence Delamotte obtained his information is at present a mystery, as it is probable that the barbican had subsided on to the beach long before 1789. The dimensions

given by him are 100ft. by 50ft., but as the plan is not drawn to scale it is difficult to say whether the measurements apply to the rectangular portion alone or to the entire structure.

Of views which show the ruins there are many, the earliest of them being perhaps the engraving by Buck, produced about 1735 ; but none of these prints afford us much help in constructing a mental picture of the original fort in the light of the written records quoted in the foregoing pages.

I will add that the Crown continued to appoint a governor for more than fifty years after Sandsfoot had been abandoned to the storms. As recently as 1795 Gabriel Tucker Steward was the captain of the derelict castle.

PORTLAND CASTLE.

The history of the " new " Castle upon the sea shore appears to begin in the 31st year of Henry VIII., shortly before the earliest known mention of Sandsfoot, and I may say that no allusion to the older fortress now called Rufus, or Bow and Arrow, Castle occurs in the records of the period under consideration ; therefore, Rufus Castle had been presumably dismantled before the middle of the sixteenth century, if it was a royal and not a feudal stronghold.

In 1540 a list was prepared of the names of persons in the King's fortresses, among which " Portland bulwark " was the solitary place of arms within the borders of Dorset. The captain was Thomas Marvin, who received 12d. the day, with an allowance of 6d. daily for two men. The gunners were four in number, viz., Robt. Skogan, John Waclyn, John Holman, and John Hill, whose pay was 6d. the day respectively. (Exch. acc'ts 60—4.)

A change in the governorship took place in February, 1545-6, when John Leweston was appointed as Lieutenant of the island and Captain of the Castle from the 31st Decr. then last, with a salary of 16d. the day during his life. The grant also authorised him to nominate a deputy and to elect

thirteen meet and able men who were to be "daily abiding there," that is to say, two porters, six gunners, and five soldiers. (Pat. roll, 14 Elizabeth, part 8.) It is remarkable that these offices were conferred upon Leweston under the seal of the Court of Augmentations, and that the expenses were to be paid by its receivers in the counties of Somerset and Dorset. As we know that this Court was set up by Henry VIII. for the purpose of administering the revenues of the suppressed monasteries, it is not improbable that the cost of building the two castles, as well as the pay of their garrisons, was in part provided out of ecclesiastical funds. On this point I will recall the tradition that the stonework of Sandsfoot was brought from Bindon Abbey.

At the time of the rebellion in the west country against Edward VI., Portland Castle had furnished some military stores, which were replaced in 1552; these items consisted of two Hamburg barrels and two Flemish barrels of serpentine powder, together with 24 bows and the same number of sheaves of arrows. In 1554 John Leweston, described as of Leweston, enters into a recognizance (with a penalty of 1,000 marks) whereby he undertakes to defend the castle on behalf of Queen Mary with all his power, cunning, and industry, and that if his own power should be insufficient he would call in the sheriffs of adjoining shires, warning them to come to his assistance. For an unknown reason the Captain was superseded a few years afterwards, and his post given to George Strangways, but the latter was in turn relieved of the office on account of sickness in May, 1557, when Leweston was re-appointed to his former duties. (Acts of the Privy Council, *passim*.)

Passing on to Elizabeth's reign, I find that Charles Arundel received in 1572 a reversionary grant of the governorship of the castle and island after the death of Leweston, but as the latter survived until 1584, it is doubtful whether Arundel was ever in command there. (Pat. roll, 14 Elizabeth, part 8.) We now obtain a little information concerning the structure and its equipment. In the month of October, 1574, Leweston

signed a certificate as to "the wants" of the establishment, in which he says that

The whole platform upon the keep is in great decay and requires much timber for its repairs.

He asks for fifty calevers (handguns) and their furniture, also for four pieces of brass, being sakers, and forty-four shot for each piece, in place of two demi-culverings of cast iron and three iron slings and four bases, which pieces had been condemned and were not serviceable. (Dom. State Papers. Eliz.)

I have already mentioned Sir George Trenchard's account of the renovations at Sandsfoot between April, 1584, and October, 1586, and I will here cite a few extracts from that part of the document which relates to Portland during the same period.

New making two platforms, viz., the lower and upper keeps, at a cost of £148 0s. 7d.

Mending the roof over the captain's lodging; eleven new pipes of lead. New laying the lead over the hall, and repairing the porter's lodge. Making a little house, or "skeelinge," of boards to put the gun ladles and sponges in.

Digging two saw pits, and providing sand for casting the lead. The total cost was £228 14s. 8½d. (Declared accounts. Pipe office 3570.)

About this time a governor who is not included in Hutchins' list comes upon the scene. In 1592 Sir Walter Raleigh had added to his many other occupations by filling the dual office of Lieutenant of the island and Captain of the fort, but the routine duties were then performed by a deputy named Nicholas Jones. Twelve months later, Sir Walter was in correspondence with the Government, who had required him to put the castle into a proper condition for defence. He told the Privy Council in August, 1593, that there had been no good ordnance at Portland since the brass cannon and best pieces were taken away by an officer for use in the Queen's ships, and he asked for a new supply, as they were then defenceless. In all probability this requisition was only partially satisfied, because the survey of James I. mentioned

various types of artillery, but no brass guns of any kind. A second complaint by the Governor as to the deficiencies at the castle proves that the statesman-soldier had then been succeeded by his brother, Carew Raleigh, who wrote a letter as captain in 1596 to the effect that his garrison had been employed for other services, and that he wished for 100 men to be held in readiness in the country near to Portland.

When speaking of Sandsfoot I alluded to a report by Sir Richard Morryson on the condition of that fort in 1623 ; the corresponding inspection of Portland furnished similar details as to the latter castle at the same date—

The Institution.

Sir Carew Rawleigh, captain, and the reversioner is Gilbert Rawley.
John Bone, lieutenant, 12d. the day.

Robert Westrom and William Williams, the outer and inner porters,
8d. each.

Robert Hone, master gunner, 8d.

The men (names omitted) 6d. each.

Iron ordnance, &c., serviceable.

3 culverings, 9 demi-culverings, 1 saker,; total 13.

1 field carriage for culvering, and 3 for demi-culverings.

7 ladles complete, for cannon.

Round shot of iron, 899.

Also powder, match, muskets, bandeleers, moulds, long pikes, black bills, crowes, heads and rammers, cressets, 20 bedds and 40 coyne (wedges).

Unserviceable ordnance, &c.

2 sakers of iron, valued at £33 12s., and 9 field carriages for cannon, valued at £70 13s. 4d.

Also sponges, muskets, flasks and touch boxes.

Reparations.

In this castle, on the upper platform are several defects and leaks in the lead by which the "seeling" and joists under the same are decayed and ready to drop down. The joists must be supported with stone "cartowse" and timber along the wall of freestone, but this cannot prevent the further rottenness of the woodwork. Alternatively, the lead may be sold and a sloping roof of sufficiently strong tiles provided, as no ordnance was used on that roof, which was only a covering of the house. By estimation this would cost £110 4s.

Upon the second battery the platform is very good, but it must be removed to repair the leaks of the lead—£4 10s.

Also, upon the lower battery where five pieces (of artillery) stand, each of them wants a platform which will cost £16 10s. Also, in the same room the lodgings for gunners, of which one is half decayed, must be newly lathed and plastered, with several partitions to the same; also, about the house, removing the staircase which "hinders the traversing of a piece"; making a door at the coming in; mending glass windows and the bridge at the coming in, with a palisado before it. Estimated to amount to £41 9s. 6d.

Upon the south-west side of the bridge the moat is overgrown and must be dug wider and deeper, and enclosed on the inside with a stone wall 26 rods long to the bridge, at 35s. the rod, which will cost, with digging the moat, £45 10s.

Also, towards the north-west side of the bridge the moat is daily overflowed by the sea, so that at high water there is no passage to the castle on that side; there, the moat must be mended with a counter-scarp to withstand the sea and prevent its overflowing, which being 15 rods in length, at 45s. a rod, with cleansing the moat, together with a stone traverse towards the sea to keep the water in the moat and resist the force of the sea on that side, will amount to £68 15s.

The main defect in this castle, as in several others, is that it is undermined by the waves of the sea; there is fallen down some 4 rods of freestone wall about 5 feet high which is to be new made, and it will cost to do it substantially £7 a rod, £28. For preventing the like accident, which may cause the ruin of this fort, there must be 80 rocks of 3, 4 or 5 tons apiece laid before the same for a bank against the force of the water, each rock being brought from several places about the island by water, which would amount to about £240.

The whole sum by the engineer's estimate is £554 18s. 6d. There is missing a brass piece of ordnance whereof the lieutenant is to give an account, also of 10 men at 6d. the day whom we found to be deficient at our being there.

An old trench without the wall of the castle, more dangerous than profitable, is to be thrown down at the charge of the islanders. (Harl. MSS. 1326.)

As in the case of Sandsfoot, I think we may believe that Henry VIII.'s bulwark at Portland was restored, shortly after 1623, to a condition approaching its former strength. During the Civil War it was held in turn by both parties, and its resistance under Colonel Wm. Ashburnham until April, 1646, proved to be the last serious effort on behalf of the Royalist cause in Dorset. The Commonwealth Government placed one company of troops in charge of the fort, a better provision

than was made for Sandsfoot, which is alleged to have been defended by three old men in 1653, and therefore of no value "if the Dutch had a mind to land."

One other fact remains to be mentioned. An excellent ground plan of Portland Castle, dated 1725, is preserved in the British Museum, the scale being one inch to twenty feet. The drawing shows a building with a semi-circular face of masonry over-looking the sea, and protected on the landward side by a walled enclosure, the general appearance strongly resembling the fort as it is at the present day ; and I feel no doubt that the drawing also gives a faithful picture of the original structure without any material change. At the foot of the plan the draughtsman added a note to the effect that the use of this castle was to protect trading vessels against privateers, and that it was well situated for that purpose, the guns being near the surface of the water ; whereas Weymouth Castle, two miles distant, stood on ground that was too high, which was probably the reason why that castle was demolished and Portland alone kept in repair. (Brit. Mus., King's Library, Crown XII., 24.)

Although we may not altogether agree with the suggested cause of the abandonment of Sandsfoot, the memorandum is interesting as the expression of an opinion held by a military engineer in the first half of the eighteenth century.

POSTSCRIPT.

Since the foregoing paper was set up in type I have found certain accounts among the State Papers of Edward VI. for the year 1552 which appear to contain the amount of the original expenditure when these two castles were built. The information is set out in the form of a "brief declaration" of the whole naval and military expenses incurred by Henry VIII. and Edward VI. during the wars against France and Scotland, the total sum being nearly three and a half millions sterling.

The figures which more immediately concern my subject are thus stated—

“Fortifications in the late King’s time” (*i.e.* Henry VIII.).

“The castell or forte of Portlande, £4,964 19s. 10 $\frac{3}{4}$ d.

“The castell of Sandfote, £3,887 4s. 2d.

(S.P. Dom. Edw. VI. Vol. XV., No. 11.)





A Dorset Inventory of 1627.

By NELSON M. RICHARDSON, B.A.



SOME time ago I had the good fortune to meet with, in a bookseller's catalogue, an inventory of "the goods and chatles of William Edmonds alias Younge of Woodcotte in the parish of Handley in the Countie of Dorset yeoman deceased taken and praysed the fowerteenth day of January by William Clarke John Coumbe and Henry Thorne Anno Domini 1627."

The Inventory is contained in a parchment roll about 45 inches long and six inches wide, indented at the top, *i.e.* cut off from the original parchment in a wavy line, so that by fitting it to the other piece it may be proved to be the original and authentic document. Hence the term "indenture."

The house which contained the goods and chattels would appear to have been that of a superior farmer, and better furnished than the average, as far as my small experience of inventories of that date goes. There were ten or eleven rooms with furniture in them, besides possibly empty garrets, which are described as follows :—(1) Hall, (2) Roome within

the Hall, (3) Buttery, (4) Kitchen, (5) Brewhouse, (6) Millhouse, (7) Woollhouse, (8) Ghest's Chamber, (9) Chamber over the Hall, (10) The little Chamber, (11) At the Stayer head. This last was probably only a landing, and some of the others may have been outhouses.

The Hall was handsomely furnished with two carpets, two table boards, one chair, probably for the master, or possibly the mistress, three forms, eight join stools, and 10 cushions. The rest consisted of a pair of iron "*andiers*" (which are, I presume, what we call andirons) and one copper candlestick—rather a poor light for supper if no more were used, but there were plenty, three of pewter and five of brass, in the Buttery. In the room within the hall were two table boards and a pair of tables. I do not know whether it is so, but I presume that table boards may be boards supported on moveable trestles, and tables are so called when made as one piece of furniture. There were in the house six bedsteads, of which only one, that in the Guest's Chamber, had curtains, and three trucklebeds, the Room within the Hall and the Woolhouse having each one bedstead, but apparently no bedclothes, though the others are well supplied with them, the two standing bedsteads and the trucklebed in the Chamber over the Hall boasting three feather beds, seven feather bolsters, seven coverlids and five pairs of blankets, though only one pillow! I think, however, that the pillows must have got mixed, as, for the bedstead and trucklebed in the Little Chamber, there are no less than six pillows. In addition to the ordinary bedclothes the Guest Chamber bedstead has an Arras coverlid, I suppose of Arras tapestry, and a rug. This and the Chamber over the Hall are carpeted. There are also three beds for servants, which are enumerated amongst such things as hurdles and flitches of bacon; but where they were placed I cannot tell, perhaps under the latter, or in some loft. The linen is kept in two presses, one chest and one box at the stairhead, and consists of 20 pairs of sheets, six pairs of pillow-ties (probably pillow-cases with strings instead of buttons), three cupboard cloths and one damask board cloth,

a dozen napkins, but only nine towels. Baths are not mentioned, but they appear to have been dropped when the Romans left England, and are quite modern institutions, Early Victorian, I think, if not later, and perhaps in 50 years more will be considered as dangerous to health as they probably were at the time I am speaking of. There were several chests, coffers, and cupboards in the house, and one livery cupboard; only three chairs, but not much else in the way of furniture besides what I have already mentioned. In the Kitchen were many pewter utensils, three salts, a flagon, 18 platters (as well as 10 dozen wooden trenchers), two dozen pottingers, two dozen saucers, two basins, two plats (I suppose dishes), two dozen spoons, also a basin and ewer, perhaps of this material, in the Guest's Chamber only, no means of washing being found elsewhere. There were no knives (except two mincing knives) or forks (except garden forks), and probably each used his own knife which he carried about with him in a sheath, and his fingers. There were of brass, four pots, six kettles, six pans, one ladle, and perhaps other kitchen things, the material of which is not mentioned. The only silver was one silver salt and seven silver spoons, valued at £5 13s. 4d. What would they not fetch now? There was a sum of £70 in money in the house, and the wearing apparel was priced at £20. In the kitchen were two muskets and other arms. A good part of the Inventory is occupied with the farm stock—14 kine, 10 bullocks and 10 other beasts, nine carthorses and two mares, 88 wethers, 76 ewes, 61 hogs and four fat swine, besides 17 other pigs, £1 worth of unnumbered poultry, besides all the wheat, barley, oats, and peas, and farm implements. The last items are 14 flitches of bacon £4 13s. 4d., bees in the garden 5s. 0d., and one chattell lease in Woodcotte £100, the total being stated to be £659 17s. 6d., which I think is incorrect. I make it £675 17s. 6d.

The spelling of the names of the various articles is fairly consistent, though not in accordance with our practice, and some of them are not well known in the present day. A "sull" is a plough of some sort; a "willy," a large wicker

basket ; a “ renge ” probably the same as a range or bolting sieve to sift meal ; a “ serch,” which is in the same item as various sieves, may be the same as a sarse, searce, or searse, which is a fine sieve. “ Reckes ” in the item “ Reckes and Hurdells £1 ” I cannot make out. It is not rakes, for “ rakes ” comes just above in association with shovels, picks, forks, and iron wedges and similar implements for 13s. 4d. It cannot be ricks, as hay is mentioned elsewhere at £8, and ricks would even then be worth much more than £1, not including hurdles. It may mean racks for putting hay into for feeding sheep, &c. Mr. H. Symonds tells me he has seen this word meaning a small basket, in a 17th cent. Somerset document.* I am not sure if a “ saive ” means a sieve, as we have “ 6 seives ” just below. “ 3 gruntern ” in the Millhouse, associated with “ one henn Coope and one Tubb ” at 6s. 8d. are, I am told, probably the same as “ grintings ” or “ grintons ” (spelling uncertain), and mean bins with divisions for corn for grinding. They cannot be pigs, as they are amply provided for elsewhere. “ Skillets ” are, I believe, bowls with long handles, to be used as saucepans. “ One Charter ” associated with “ two basons and two pewter plats,” I do not know the meaning of. One or two friends have suggested that it is a misspelling for charger, and this may be so, but it is only a guess. “ Fower payre of Hangings ” associated with iron spits, dripping pans, pot hooks, &c., are probably some kind of hooks. Trendells, couells, silt trowes, and stoninge trowes are found in the Brewhouse. Silt trowes are salting troughs for bacon, and stoninge trowes doubtless troughs for some other purpose. Trendells are said by Webster to be weights or posts in a mill. Mrs. Richardson tells me, however, that the shallow tubs used for washing butter are called trendles. Mr. Symonds gives me another meaning, a cooler for beer, also called “ keever.”

* NOTE.—Since writing the above, I find that “ Reckes ” are small gateways fitted with side rollers to let the lambs run out of the hurdles, while keeping in the ewes.

This seems more probable in this connection. He also says of "couell" or "covell"—"Can this be a variant of cowl or coul, a wooden tub with ears for use with a stick in carrying it?" Dr. March says the word is used in Cornwall and Devon to denote a sort of basket. The Inventory is well written, though many of the letters are different from our present ones, but I think I have deciphered all the words correctly.

I will read out a few of the items from the list itself, to show some of the prices.

<i>Hall.</i>	£	s.	d.
Two carpatts and Tenn Kushings	0	13	4

Room within the Hall.

Two table bords, one Beedsteed, one Cubberd, and a payre of Tables	1	0	0
---	---	---	---

Kitchin.

One Dossen and halfe of pewter platters	1	10	0
Six brasse kittells	2	0	0
Two Musketts, two swordes, three daggers, one Corslett, and a pike	3	0	0

Woollhouse.

Fower weight of wooll and a weight of lokes ..	7	0	0
--	---	---	---

Ghuests' Chamber.

Two feather beds, Three boulsters, two pillowes, two payre of Blanketts, one Arrace Coverlead, and one Rugge.. ..	7	0	0
---	---	---	---

At the Stayer head.

Twentie payre of Sheets	15	0	0
Nyne Towells.. ..	0	10	0
His apparell both linnen and woollen	20	0	0
Three score and seaven acres of wheate	67	0	0
Fowerteene Kyne	30	0	0
Nyne Carthorses with there harnes.. ..	30	0	0
Fower fatt swyne	3	6	8

I have brought also for comparison another Inventory of 1640, but this gives no values, and refers to a much more important house at Craford (doubtless Crayford in Kent). This is much easier to read than the Handley one, though only 13 years later, so that I have not transcribed it—with the exception of the ee and ss and some of the spelling, it differs little from the writing of the present day. The pewter comprised no less than 58 dishes, besides plates and other things, and there is a good deal of silver, Turkey carpets and Turkey work, French chairs and carpets, tapestry and other hangings and curtains, but remarkably little furniture except bedsteads and chairs. It looks as if it might have been made by an amateur, perhaps the owner, Mr. Robert Draper, and he may have got tired of it before he came to the end, as one sometimes does, I fear, with such lists! But it is very interesting as far as it goes. I will not enter into further details, as it is not the subject of my paper, but pass it round so that those who wish may study it at leisure.

TRANSCRIPTION OF INVENTORY ON PARCHMENT ROLL 45IN.

BY 6IN., BELONGING TO N. M. RICHARDSON.

A true and perfect Inventory indented conteynynge all the goods and Chatles of William Edmonds alias Younge of Woodcotte in the parish of Handley in the Countie of Dorset yoman deceased taken and prayed the Fowerteenth day of January by William Clarke John Coumbe and Henry Thorne Anno Domini 1627 etc.

	£	s.	d.
Imprimis in the Hall Two Table bordes three formes			
Eyght ioyne stooles and one Chayer	1	0	0
Item Two Carpatts & Tenn Kushings	0	13	4
Item one payre of Iron Andiers & a Copper Candelstick	0	3	4
Item in the Roome within the Hall Two Table bords			
One Beedsteed One Cubberd & a payre of Tables	1	0	0
Item in the Buttery Three Hogesheads Seaven barrells			
Three timber flaggens & three timber horses to			
beare the barrells	1	0	0
Item three pewter Candelsticks five brasse Candel-			
sticks Two tinninge booles three pewter saltes &			
one pewter flaggen	0	18	0

	£	s.	d.
Item Ten dosen of Trenchers	0	3	4
Item in the Kitchin one dosen and halfe of pewter platters	1	10	0
Item Two dosen of pewter pottengers.. .. .	1	6	8
Item Two dosen of Pewter sawsers	0	6	8
Item Two basons one Charter & Two pewter plats ..	0	13	4
Item Two dosen of pewter spoones	0	1	0
Item Fower brasse potts.. .. .	2	13	4
Item Nyne Skilletts	1	0	0
Item Six brasse kittells	2	0	0
Item Six brasse pannes	3	0	0
Item one Chafinge Dishe one pisell & morter a skimer & a brasse ladell	0	4	0
Item Seaven Iron spitts two payre of Iron Andiers Fower payre of Hangings three payre of pott- hookes one griddier one fyershoule one payre of tongs two dripinge pannes & a fender	1	15	0
Item Two Musketts two swordes three daggers one Corslett & a pike	3	0	0
Item one Birdinge peece.. .. .	0	6	8
Item Two minceinge knives one Cleaner one fleshhook & a Treiuat	0	2	6
Item one Table borde three formes one Chayer one Treay and two booles	0	6	8
Item in the Brewhouse one furnace	0	13	4
Item Fower Vates Six Trendells Fower Couells & Six payles	1	0	0
Item one silt Trowe	0	3	4
Item Two stoninge Trowes	0	6	8
Item in the Millhouse one malt mill	0	10	0
Item Three grunTERS one henn Coope & one Tubb ..	0	6	8
Item a well buckett & a Roope	0	6	8
Item in the Woollhouse Fower weight of wooll & a weight of lokes	7	0	0
Item one beddsteede	0	5	0
Item in the Ghuests Chamber one Table borde one lyvery Cubberd two formes Three stooles one Chayer one Chest & a Carpit	1	10	0
Item one bason & yewer & a payer of Iron Andiers ..	0	10	0
Item one standinge Bedsteed with Curtins & a Truckellbedsteede	2	10	0
Item Two feather beeds Three boulsters two pillowes two payre of Blanketts one Arrace Coverlead & one Rugge	7	0	0

	£	s.	d.
Item Five pewter Chamber potts	0	5	0
Item in the Chamber over the hall Two standinge Bedsteeds one Truckellbed one Table bord and one presse	1	10	0
Item one Chest & Two Coffers	0	5	0
Item Three feather beeds Seaven feather Bolsters & one pillowe	5	0	0
Item Seaven Coverleads Five payre of blanketts one payre of Curtins & one Carpitt	6	13	4
Item one still	0	10	0
Item in the little Chamber one standing bedsteed and a Truckelbed	1	0	0
Item Two feather beeds Three bolsters and Six pillowes	5	0	0
Item Three Coverleads two payre of blanketts & one payre of Curtines	2	0	0
Item Fower Coffers one presse and a box	0	10	0
Item one Silver Salt & Seaven silver spoones	5	13	4
Item at the Stayer head two presses one Chest & one box	3	0	0
Item for linnen Twentie payre of sheets	15	0	0
Item Six payre of pilloties	1	10	0
Item Three Cupbord Clothes	1	0	0
Item Nyne Towels	0	10	0
Item one damaske bord Cloth and a dossen of Napkines	1	10	0
Item Two diaper bord clothes and a dossen of Napkins	2	0	0
Item Ten other bord clothes and Three dossen of Napkins	4	10	0
Item in money	70	0	0
Item his apparell both linnen and woollen	20	0	0
Item Threescore and Seaven Acres of wheate	67	0	0
Item of wheate in the Barnes treshed & vnthreshed..	40	0	0
Item of Barley in the Barnes treshed & vnthreshed..	60	0	0
Item of woats and pease in the barne	4	0	0
Item for Malt	1	6	8
Item for haye	8	0	0
Item Fowerteene Kyne	30	0	0
Item Fower beasts of Three yeres of age	6	13	4
Item Six Beasts of Two yeres of age	7	0	0
Item Ten yearlinge bullockes	6	13	4
Item Two hackney Mares	12	0	0
Item Nyne Carthorses with there harnes	30	0	0
Item one yonge Coult	1	0	0
Item Fowerscore & Eyght Weathers	32	0	0

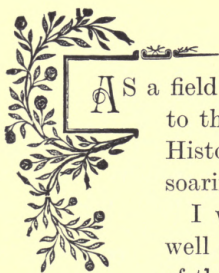
	£	s.	d.
Item Threescore & Sixteene yewes	24	0	0
Item Threescore & one hoges	18	0	0
Item Fower Fatt Swyne.. .. .	3	6	8
Item Seaventeene other pigges	4	0	0
Item for poultery.. .. .	1	0	0
Item two Irebound Carts Six Sulls six harrowes one dragg Three Ladders & a Rowler	6	0	0
Item Three payre of plow Irons one Iron barr two payre of Fetters and Two plow chaynes	1	7	0
Item Three Cart Ropes two Cart lynes two winnowing sheets Eyghteene sakes a Bushell & a peck	2	0	0
Item one Sieth fiue Reapehocks one hatchet one hoocke one Pickax one spade two shoules six corne pickes, three forkes ten Rackes Fower Iron wedges & a saive	0	13	4
Item for Reckes and hurddells	1	0	0
Item one willy Six seives a Renge and a serch.. .. .	0	6	8
Item three bedds for servants	2	0	0
Item for Wood and Timber	5	0	0
Item fowerteene fliches of Bacon	4	13	4
Item for Butter and Chease	4	0	0
Item for Bees in the garden	0	5	0
Item one Chattell lease in Woodcotte	100	0	0
	£	s.	d.
Sum totall	659	17	6





The Night-Soaring of the Swifts.

By AUBREY EDWARDS.



AS a field naturalist in a small way I wish to bring to the notice of the Members of this Natural History Field Club the wonderful night-soaring habit of the swifts.

I will take it that my fellow-members are well acquainted with this bird *Cypselus apus* of the family *Cypselidae* of the order *Picariae*, except as to its habit of roosting in the sky, which was first discovered by my brother, Cyril Edwards (now Rector of Mottisfont, in Hampshire), and myself in 1886, and published by me in a letter to *Nature* of October 27, 1887.

My excuse for bringing this matter before you is that, though it has been published as just mentioned in 1887 and later in the *Selborne Society's Magazine* in 1890, January—May, and by Mr. Wichell in *Knowledge*, June 1, 1897, and often noticed in short paragraphs in *The Field*, and again by myself in a lecture to the Bournemouth Natural Science Society in December, 1912, very few people have heard of it, and fewer still believe it. And it is not everyone who has the opportunity of observing it. In a Field Club like this I feel sure there will be some who can and will investigate

this most wonderful exhibition of wingmanship of this merry and wonderful bird.

I can take it for granted that you all know that the swift has nothing to do with the swallow, but is a relation of the nightjar and the hummingbird. That it is a dark olive brown bird (with a white chin), weighing $1\frac{1}{2}$ oz. and measuring $7\frac{1}{2}$ in. in length, with the comparatively enormous stretch of wing of $15\frac{1}{2}$ inches. That its four claws all point forward and are very sharp, that the sole of the foot extends to the joint above, and you might call the bird plantigrade. That the foot is designed for clinging on to rocks and walls. That the bird cannot sit on a bough; it can only lie along a ledge. That the shape of the body is like a slightly flattened fish, with perfect streamlines and nothing projecting to catch the wind. That the bird does not seem to bend the last joint of its wings in flight, but always keeps them widely stretched, never folded back like those of the swallow. That its dark brown eye is deeply set with an embrasure cut out so that the bird can see straight ahead. That it arrives in pairs in the first week in May and leaves about the 11th of August—the last to come and the first to go. That it pairs for life, and comes back to the same nest year after year. That its one note is a shrill scream, which, when uttered in chorus as the birds are flying round in rings, is the most joyous of all the birdsongs in this land. You will know that, in spite of what all the bird books say, the swift, if unwounded and in good health, *can* rise from the level ground if it has headroom and is not soaked in long, wet grass. That it never settles on the ground or at any other place than its own nest, except when it is exploring for a nesting-place. That it does everything in the air except make its nest, lay its eggs, incubate, and feed its young. That it eats, drinks, mates, and gathers materials for its nest on the wing.

That it roosts on the wing, I am not taking for granted that you know.

But if you have lived a few yards from a Church where many pairs of swifts nested, and have studied them for the

best part of your life, and have read Gilbert White's monograph on the swift in his *Natural History of Selborne*, you will know that the eggs—two or sometimes three—take 19 to 21 days to hatch, and that the young, which are blind for nine days, take six weeks to reach maturity. That they remain in the nest, never leaving it till they fly to Africa—probably without resting. That these and all other summer migrants come here only to breed, and leave as soon as the young are ready to fly; and that, unlike the swallows, the swifts have only one brood. That the hen alone tends the young. That its nest is bound together by the glutinous saliva of the swift. And doubtless, if you have had my opportunities, you have, when you realised the difficulty they have in procuring materials in the air, scattered feathers from the soundholes and watched them race for these, and noted how, though not a swift was in sight at first, soon the air was full of the dark forms capturing feather after feather till they seemed to have long white moustaches streaming out on each side. And when you have been watching up amongst the bells in the church tower, and taking notes of dates day after day, you may have been set back a whole year by a wretched mouse killing the bird you were watching to ascertain its rate of growth. You will know what beautiful glossy birds the young ones are, with their quill feathers edged with light and with their pink feet. You will know that the swift can fast for a long time, but that cold weather numbs and eventually kills it. That its food consists exclusively of winged insects, which it cannot take except in the air, as it is too highly specialised to be able to pick a fly off a window. You will know what merry and playful birds they are, and that they have been evolved for a life in the air.

I thought the members might like to be reminded of a few of the interesting facts they know about the swifts before coming to the point of this paper—The Night-soaring of the Swifts.

If you will watch the swifts at sunset on a fine evening you will see them all gather together and fly about in all

directions, like distracted spirits, for some time. Then, as the dusk creeps on, you will see them get into order, form themselves into a flock, and ascend into the sky in wide spirals, screaming all the time. They will disappear from sight several times, but come round again, and at last they will rise so high that they are lost to the sight of the unaided eye, though with a binocular you can see them for some minutes longer. Then the sound ceases, and the stars are out.

If after watching them up you had sat on a tombstone under the eaves where they build, till half-past ten (with watchers on the other side of the church) to make sure that no bird returned to the nests, and on other nights alone till eleven, you would know each time that they didn't come back to their nests *that* night.

At first—say till the first of June—all the birds go up together, but when the eggs are laid the hen stays at home ; and a male bird may often be seen driving a late-flying hen back to the nest before he goes up with the others. Mr. W. A. Wichell, the author of *The Evolution of Bird Song*, pointed out the meaning of this performance to me—the swoop of the one bird at the other and the escape of the latter, who, however, is always brought back to the nest at last. White of Selborne notices that the hens come out to feed in the evening. I proved this by cutting some of their tails square.

There is no question that the swifts go up into the air out of sight on a fine night, and that they stay away till the morning ; but what proof is there that they remain on the wing ?

Though convinced that they do, I cannot prove it, and, though I have watched them up a hundred times, I have never seen them come down again.

But a farm boy to whom Mr. W. H. Hudson was talking, near Wells, told him that they remained flying about all night, and that he had often seen them rush straight down as if falling from the sky at the same place soon after sunrise, when he was crow-scaring. This is told in "Nature in

Downland," and the boy said that he had found it out for himself. And Mr. Edward Hart, of the Bird Museum at Christchurch, tells me that he also found out some 14 or 15 years ago that the swifts ascend and spend the night in the air, and that he has counted them up at sunset and counted them down at sunrise.

That is as near as I can get to proof.

If anyone should say "They go and roost at a distance" I can only reply, "Why should they? Why should they go and roost in distant cliffs—which is the only reasonable suggestion that can be made—when they have their own snug nests at hand, in which they *do* rest when the night is not fine enough for them to ascend?" Many a time have I watched them make a trial trip and then come down again and go into their own proper nests because the weather was not good enough.

Of course it is no question of food. I believe it is sheer delight in their strength of wing which sends them up. And, as for keeping there, very little exertion would be required for a swift to balance itself with its head to the wind during a summer night.

Roosting in the sky is quite an easy matter for the swifts. The difficulty is in people believing it.

I hope the members of this Field Club who have the opportunity will investigate the matter.

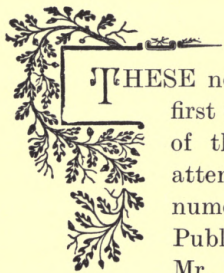




Thomas Gerard of Trent, His Family and His Writings.

By Rev. E. H. BATES HARBIN, M.A.

[This paper is an amplification of my remarks when the Field Club visited Trent Church on the 11th September, 1912 (Vol. XXXIV., p. xxxvi.) I offer it on the ground that the two families of Storke and Gerard, whose history is here pieced together, were of Dorset origin, and that Trent itself is now a part of Dorset.]



THESE notes deal with two distinct subjects. The first part gives a fuller account of the descent of the Manor of Trent than has yet been attempted or even possible. For the numerous copies of and extracts from the Public Records I am greatly indebted to Mr. E. A. Fry, who has also provided references to Hutchins and other printed authorities, and made valuable suggestions on doubtful points. In the second part I endeavour to present the accumulative evidence which assigns the authorship of the "Particular Description of Somerset" and "Coker's Survey of Dorset" to Thomas Gerard of Trent. For ease of reference the Somerset Survey is quoted throughout the first part as by Gerard.

I.

The early history of Trent has been very fully recorded by Mr. J. Batten and Mr. T. Bond.* It will suffice to state here that on the death of William de Braose, temp. Hen. III., his great property, including Trent, was divided between his three sisters: Eleanor wife of Humphrey de Bohun, Eva wife of William de Cantilupe, and Maud wife of Roger Lord Mortimer of Wigmore. Eva Cantilupe's third was bestowed on the Priory of Studley in Warwickshire; Eleanor Bohun's third eventually passed to the Young family; and the fortunes of Maud Mortimer's share are the subject of this part of the notes. In the reign of Edward III. it was the property of Sir Thomas West, who exchanged it with John de Testwood and Mary his wife for the Manor of Testwood, in the parish of Eling, near Southampton, in 1358.† Sir Thomas was descended from a younger branch of the Cantilupes, and used the arms of that family on his seal "yet circumscribed with his own name," as Gerard had noticed on a seal in his own custody.‡ The author proceeds: "As for John Testwood de Trent by his exchange, he was father of a second John, and he of a third John whose inheritance fell by his only daughter and heir Isolda unto Thomas Lane, and this in the same manner to John Storke, whose predecessors had long remained in Dorsetshire."

It is difficult to add anything to this account of the family. Some references will be found in the V.C.H. of Hants, IV., 549. In 1378 John and Mary Testwood released to John Harewelle, Bishop of Bath and Wells, an acre of land and the advowson

* Som. Arch. and Nat. Hist. Soc. Proc., XX., ii., 113; Trent; J. Batten; XXI., ii., 28, Honor of Odecomb and Barony of Brito; T. Bond. Henceforward simply Proc.

† Dorset Records, XVIII., 153; Ped. Fin., divers cos., 32 Ed. III., 545.

‡ Particular Description, Somerset Record Soc., XV., 176.

of the Church of Trent.* The Bishop probably obtained this grant to enable him to make provision for the Rev. Richard Harewel (Herwell), perhaps a nephew, who was Rector of Trent in 1402 ; and afterwards he disposed of his right to other parties.† In 1396 John Testwood and Elizabeth his wife made a settlement of lands in Chilton Cantelo for the benefit of Elizabeth for her life, with remainder to John and his heirs. These lands were resettled in 1405.‡

The last John Testwood made his will in July, 1412.§ He directed his body to be buried in the chapel of St. Mary in the church of Trent, and left ten shillings for the sustentation of the work of the said church. He mentions his wife Elizabeth, his daughter Isolda, and Thomas Lane, whom Gerard records to be his son-in-law, and father of a daughter and heiress married to John Storke.

In 1430 John Storke and Alice his wife are given in a list of persons owing homage and service to Sir Thomas Beauchamp, of Whitelackington, in Somerset,|| but there is nothing to show whether the lady was his second wife (see *post*) or the daughter of Thomas Lane.

The marriage must have taken place before 1428, since the Feudal Aid for that year enumerated John Storke, John Botreaux, and the Prioress of Studley as joint owners of Trent.¶ As Storke was party in a Final Concord in 1416 he was then of full age, and must have been born not later than 1395. He owned property in Blandford Forum which may have descended to him from Simon Storke, who in 1392 settled the same quantity of tenements, &c., in Chyping

* Ped. Fin., 2 Ric. II., 18. S. R. S., XVII., 103.

† Weaver, Somerset Incumbents, 201.

‡ Ped. Fin. 20 Ric. II., 31, S. R. S., XVII., 167 ; 6 Hen. IV., 45, S. R. S. XXII., 18.

§ S.R.S., XVI., 59.

|| Ped. Fin., 8 Hen. VI., 91. S.R.S., XXII., 189.

¶ Feudal Aids, IV., 375.

Blandford on himself and Matilda his wife, with remainder to William Stork and Juliana his wife.*

John Stork was evidently a man of considerable ability and standing in the county of Dorset. He is frequently found in Final Concords, acting as a trustee for one of the parties. During the long reign of Henry VI. he was in nearly every Commission of the Peace, besides sitting as Assistant Judge at Assizes, and nominated for Government business generally. He died early in the next reign. On the 24th January, 4 Edw. IV. (1464), an order was entered on the Fine Roll (No. 273) to take an inquisition on John Storke gent deceased, but unfortunately this inquisition is not in existence.

Alice, his widow, had previously been married to John Petyr. She died on 6th December, 1474, and the inquisitions taken after her death show that she held no property in Somersetshire, and that her property at Bagber, near Sturminster Newton, was given in dower by her first husband, to which her grandson, William, son of John Petyr, deceased, was heir.†

In a fine of 1446 John Storke is described as "senior," from which it may be inferred that another John was now growing up. He was married about 1460 to Agnes, daughter and heiress of Thomas Inge (Ynge), of Corton Denham, but died almost immediately after his father. On the Patent Rolls for 12th January, 1465-6 is entered a licence for William Kayleway to enfeof Agnes late the wife of John Storke of his Manor of Corston (Corton) held in chief to hold the same to herself and the heirs of her body, with remainder to the right heirs of Thomas Inge. On the Fine Roll of 6 Ed. IV. (275 m. 22) is an order dated 10th May, 1466, to hold an inquisition on John Stork for lands in Dorset. But again, unfortunately, the inquisition is not in existence.

* Ped. Fin. 16 Ric. II., 95 ; Dors. Records, XX., 217.

† Inq. p.m. Alice Stork, 14 Ed. IV., 12.

There were two sons, John his successor, and Tristram, born in 1465.

Collinson gives an account of the Inge family under Corston near Bath (III., 346). Gerard, who had "in his custody many ancient charters and deeds of the manor," rightly assigned them to Corton Denham, and concludes by stating "from whose heir generally (of Inge) by the Storkes it devolved on the Comptons, late owners of it" (p. 201). It is probable that Agnes Storke remarried Roger Norman. The Patent Roll on 16th Nov., 1484, records a licence to several trustees (but not Kayleway) to grant Corton to Roger Norman for life, remainder to John Stork and the heirs of his body, remainder to the right heirs of Thomas Inge.

John Storke (III.) was married by 1483, as in that year he conveyed his interest in the Blandford property to trustees as dower for his wife Margaret, a daughter of John Wadham, senior, of Merifield. He died 20th October (Oxfordshire inquisition), or 9th October, 1485 (Dorset ditto). In the former county he held the Manor of Burton Ynge; in the latter certain tenements at Blandford which had belonged to his grandfather John Storke, and settled by him as above, and lands in Bradford Abbas, Underdowne, Lye, and Wareham. The Somersetshire inquisition is missing, but from the particulars collected after the death of Tristram Stork, it appears that the family estate included part of Trent, and lands in Corton, Holway, Crothorne, and Charlton Canvyle. There were no children, and his heir was his brother Tristram, aged twenty years and a half.* An annuity of forty shillings from his Bradford property was given to John, son and heir apparent of Peter Bamfield Esq. (of Hardington).

Margaret Storke remarried Robert Gilbert, son of John Gilbert of Witcombe, in Corton Denham.† Robert out-lived his wife, and died 12th November, 1537. The inquisition

* Inq. p.m. John Storke, in Vol. I. Hen. VII., pp. 56, 57.

† Inq. p.m. Tristram Stork, 24 Hen. VIII., Vol. 54, 73.

p.m. incidentally gives the information that Margaret's father was John Wadham.*

Tristram Storke may have received his Christian name from Tristram Burnell, of Newton Surmaville, near Yeovil, who was a friend of his grandfather, John Storke. He was returned as one of the gentry resident in Somersetshire temp. Henry VII., † married Alice, daughter of Robert Bingham, of Bingham's Melcombe, and died 18th August, 1532, leaving four daughters co-heiresses.

His property extended into four counties, and the information given in the inquisitions shows how it was divided. ‡ Johanna, aged 30, wife of Richard Compton, received Corton Denham, Holway, and Crothorne; Isabella, aged 28, wife of Alexander Seymer, received Burton Ynge (Bourton), Oxfordshire; Anne, aged 26, wife of John Larder, received lands at Hinton Admiral and Christchurch Twyneham, Hants; and Mary, aged 24, the wife of William Gerard (Jerard), "my great-grandfather from whom though shee were the youngest sister the principall house of them (*i.e.* Trent) is descended to myself." §

The surname of Gerard is not uncommon in Somerset and Dorset, and is often found under the form Jerarde. Curiously enough there was a family called Jerarde resident in the neighbouring parish of Sandford Orcas, who are frequently described as Gerard. The arms of the two families are, however, quite distinct, that of Jerarde of Sandford being Arg. a chevron gules between three ermine spots, while Gerard of Trent bore quarterly Gerard and Brinn (of Lancashire).

Thomas Gerard of Trent, the author, evidently believed that his family came originally from Lancashire, where the

* Inq. p. m. Robert Gilbert, 30 Hen. VIII. C. Vol. 60, 109.

† Collinson I., XL.

‡ Inq. p. m. Tristr. Storke: Vol. 54, 62; 54, 73; 54, 75; Alice Storke (*ob.* 8 Aug. 1546), Vol. 85, 34.

§ Particular Description, 177.

name is found in very early records. He included many coats of arms taken from the Lancashire pedigrees in his heraldic tree painted in Trent Church, but it is certain that according to the account in Hutchins' Dorset I., 609, the ancestor had moved southward before these alliances were made. He did not enter his pedigree at the Heralds Visitations for either Dorset or Somerset in 1623 ; but his relation John Gerard of Longhide in Purbeck, recorded his pedigree, and also gave a shield which contained the bearings of no Lancashire alliances, but a number of old Dorset families ; and also included several quarterings which belonged exclusively to the Trent branch of the family by the marriage with Mary Storke. I have a strong suspicion that the Heralds, to whom Thomas Gerard was well known, either by accident or design assigned his shield to the Purbeck branch without proper enquiries.

The Gerard pedigree begins with William Gerard of Bremhill, in Lancashire, who married Jane, sister and co-heir of Peter de Bremhill. Two generations are skipped, and their great grandson, also William, who was born about 1400, is found at Friar Mayne, co. Dorset, and married to Edith, daughter and heir of Thomas Meeres of Osmington. Of this marriage there were two sons, the younger, Robert, being of Longhide in Purbeck. The elder son John was the father of another John, who married Margaret, daughter and heir of Walter Wells of Tincleton, and had issue another John, with whom we find ourselves on firm ground. He married firstly Dorothy, daughter of Paul Cook of Sussex, * and secondly in 1528 Isabella Plompton, widow. He died 24th August, 1542, leaving property in Broadway and Nottingham, West Waddon in Portesham, and a moiety of other property in West Totton and Chickerell, and four burgages in Dorchester. William Gerard is his eldest son and heir, and is forty years old and more. †

* Brown Collections at Taunton Castle, Vol. 23, 134.

† Inq. p. m. J. G. ; C., 65, No. 43.

There were also several other children. John of "Freer Mayn" made a will which was proved 12th July, 1558. He mentions his wife Edith, daughter of George Turberville, his brother Sir Henry, knight of St. John of Jerusalem, Elizabeth his brother's daughter, and his nephew Thomas. * Dorothy married — Fauntleroy, and Alice became a nun. †

William married Mary Storke, and settled at Trent. In the windows of the hall of the old manor house (long since destroyed) were shields bearing the arms of Testwood and of many others. ‡ He died in January, 1567–8, and was buried in Trent Church, where plain slabs marking the graves of the family were visible until a recent restoration. From his will dated 12th and proved the 31st January, 1567–8 § and the inquisition, || it appears that he held the Manors of Broadway and Waddon alias West Waddon, and lands in Nottingham and Crocketswaye in Broadway. His only son and heir was Thomas, aged forty years and more. His daughters were Elizabeth Martin ¶ and Julian Pagys.**

Mary Gerard, the heiress of Trent, died 28th March, 1577. She left directions in her will to be buried in Storkes Ile in Trent Church. §§ The inquisition held after her death shows that she owned the Manor of Trent held of the honour of Trowbridge.

Thomas Gerard married Isabella, daughter and co-heiress of Leonard Willoughby of Toners Puddle, by whom he had a numerous family. He died 18th November, 1583, having

* Brown, F., Som. Wills, I., 46.

† Brown Collections, Vol. 16, 811 ; 32, 133.

‡ Particular Description, p. 177.

§ Som. Wills I., 40.

|| C., Vol. 150, 185, Dorset.

¶ Of Park Pale in Tolpudde ; she died in January, 1587–8 ; Will, Rutland 3.

** Her first husband was George Milburne of Milborne Port ; he died in 1559 ; Will, Cheyney 49.

§§ Som. Wills, I., 40. Inq., Chanc. ser. II., Vol. 195, 123.

desired to be buried in the Ile belonging to his house in the Church of Trent. The inquisition shows that he held undiminished the family property in both counties, and his will directed that portions should be paid to his younger sons, James, John, and Thomas, and to his daughter Elizabeth.* William his eldest son succeeded, being about thirty years of age. He married Mary, daughter of Sir Christopher Allen of the Mote, Kent; and died 1st May, 1604, aged 52 years. Collinson (II., 386) gives the inscription on his monument.

Gulielmo Gerard, armigero, ex antiqua Gerardorum familia in agro Lancastriensi oriundo, monumentum hoc imposuit uxor ejus maestissima, filia Christopheri Allen, equitis aurati militis: obiit May 1, Anno. Dom. 1604, ætat. vero suæ 52.

As he died intestate administration was granted to his widow; which was afterwards renounced, and a fresh administration granted to the Honourable Lord Paget, a cousin of the widow, during the minority of the children, Thomas, Mary, and Ethelreda. Another daughter, Anne, died 25th January, 1596, and was buried in Trent Church. The widow outlived her son Thomas by a few weeks, and died 30th December, 1634. Her will was made on 22nd Oct., 1634, and proved 5th January, 1634-5. She mentions her daughter Lady Hansby, the daughter of her son Edward Gerard, and certain grandchildren, including a Roper. Her life interests in the Manors of Broadway and Nottingham were granted in 1607 to Thomas Eliot for forty years on account of her recusancy; † and this declining towards Roman Catholicism may have been the reason why she did not administer the estate of her late husband. In 1600 Broadway was returned as belonging to Thomas Gerard, a recusant; but either the date or the Christian name is in error. In the Recusant Rolls for the latter part of the sixteenth

* Som. Wills, I., 46. Inq., Ser. II., Vol. 208, 158.

† Brown Collections, XXIII., 136.

century, under Trent, William and Mary Gerard, with some servants, are entered. *

The inquisition held after the death of William Gerard returns that he held the family property undiminished in Trent, Nottingham, Broadway, and Waddon; and that his heir is his son Thomas, aged eleven years on the 17th March last past, 1603-4. †

Thomas Gerard was therefore born 17th March, 1593. He is very probably the Thomas Gerard who matriculated from Gloucester Hall, Oxford, on 18th June, 1610, though the age is given as sixteen years. The next thing known about him is his marriage in 1618 to Anne, daughter of Robert Coker of Mappowder, in Dorsetshire. Of this alliance he was so proud that he caused to be painted on the soffit of the arch separating the Storke aisle from the nave of Trent Church an elaborate heraldic tree, showing on one side the alliances of his own family, and on the other those of the Coker family. ‡

Relying on the evidence given in Part II. of these notes to reckon Thomas Gerard as the author of the Particular Description of Somerset, this book will give a very fair idea of the man and his mental equipment. One point comes out very plainly. Whatever the theological leanings of his parents he was decidedly anti-Roman Catholic, and was fond of a sly dig at the weaknesses of its professors. He was an enthusiastic herald and genealogist, and frequently apologises to the reader for providing so much of his favourite studies. He was well known to the landowners of Somerset and Dorset, and was evidently given *carte blanche* to transcribe the title-deeds of their lands. He is, however, careful not to put down anything that might cause trouble, and writes, "you must not look for tenures here, for too manie looke into them." (P. 2.) He had a great admiration for Camden ;

* Som. and Dor. N. and Q., V., Art. 86.

† Inq. p. m. ; C., 282, 53.

‡ A good illustration will be found in Collinson II., 384. Mr. Batten has identified nearly all the arms in his paper.

and having to point out an error in a work so general as the *Britannia*, he continues, "farr be it from me to tax him, whose bookes I was never worthy to bear after him." (P. 101.)

He had read the national records in London, and his knowledge of their contents is remarkable, though equalled by John Smith of Nibley, a contemporary antiquary, who wrote the *Lives of the Berkeleys*. Another member of this fraternity, William Burton, author of a history of Leicestershire, seems to have been a personal friend. As the owner of Leland's collections Burton certainly allowed Gerard to consult and copy such parts as interested him. Unfortunately an effort about 1615 to revive the original Society of Antiquaries, which came to an end at the death of Queen Elizabeth, was stopped by a hint that King James took a little mislike of the Society; and Gerard had no opportunity of discussing this favourite subject with congenial friends on visits to London.

In the midst of his labours his wife died on 25th June, 1633, leaving, as her monument in Trent Church states, one son and five daughters. Thomas Gerard died on 13th October, 1634. The inquisition enumerates the family estates in Somerset and Dorset, and gives as his heirs his daughters, Elizabeth aged twelve, Anna aged ten, Ethelreda aged nine, Annie aged six, and Frances aged four years, the son having died before his father.

Thomas Gerard died intestate, and administration was granted to his nephew, John Gerard, on 17th February, 1634-5. The estates were divided between the four sisters who grew up; Annie died 9th October, 1637. Elizabeth married Bullen Reymes, M.P. for Weymouth; * Anna married Colonel Francis Wyndham and received Trent for her share; Ethelreda married Edward Hyde, of West Hatch, in Wilts; and Frances married John Wynter, of Dyrham, co. Gloucester.

* Som. and Dor. N. and Q., IV., v.

After Worcester fight in 1651, to Colonel and Mrs. Wyndham fell the dangerous task of providing for Charles II. for three weeks while his friends tried to find a way of escape from the Dorsetshire coast. Failing this the King was conducted to Hale, near Salisbury, where he was sheltered by Mrs. Mary Hyde, related to Edward Hyde, the brother-in-law of Mrs. Wyndham. After the restoration Anne Wyndham wrote an account of the King's sojourn at Trent, under the title of "Claustrum Regale Reseratum."

The male line of her descendants died out in the third generation ; and the relics of the royal visitor, a knife in a case and two worked caps, together with the portraits of Colonel Wyndham and his four sons, are preserved at Newton Surmaville, having descended to the Colonel's daughter Elizabeth, who married William Harbin, of that place.

II.

The second portion of these notes contains the evidence which shows that the last Thomas Gerard of Trent was the author of the "Particular Description" of Somerset, and also of Coker's "Survey of Dorset." This evidence is considered under four heads.

- (1.) Thomas Gerard wrote the "Particular Description."
- (2.) He also wrote a survey of Dorset.
- (3.) This work is the Survey hitherto attributed to John Coker.
- (4.) This attribution has arisen from pardonable misunderstanding of certain passages in the Survey.

The following pages are based upon an exhaustive article by Mr. John Batten, F.S.A., in *Som. and Dors. N. and Q.*, V., Art. 83, "Who Wrote Coker's Survey?" and on my introduction to the *Particular Description of Somerset*; *Som. Rec. Soc.*, XV.

(1.)

As the manuscript of the "Description" has no title page nor introductory matter, the author and date have to be determined by internal evidence. The date can be found at once. Under Queen Camel "a sixth bell was added in the yeare of grace 1633 by William Perry a parishioner," p. 197. Under Ile Brewers, "now the seat of Mr. Walrond, at this present Sheriffe of the county." William Walrond filled that office in 1632-3. So the Description was being written out in 1633.

The author reveals himself in his account of Trent, p. 176. "The place which now gives me habitation." One of the four daughters of John Storke was married unto "William Gerard, my greate grandfather, from whom, though shee were the youngest sister, the principall house of them is descended to myself." "In my hall are the arms of Testwood and many others," the former owners of Trent. In 1633 Thomas Gerard, the great grandson of William Gerard, had been living there for thirty years, having succeeded his father at the age of eleven. The author's Christian name comes out in his account of Odcombe, p. 104. Referring to the arms assigned to King Brute, he observes: "I am a Thomas, and therefore hard of belief." It may therefore be considered proven that Thomas Gerard was the author. There is no difficulty in supposing that a gentleman of independent means from his youth upward could have made a survey of two adjacent counties by his fortieth year.

The account of Somerset is not complete, as the second volume of the manuscript has disappeared; but there are sufficient references to show that the author had been through the length and breadth of the land. Gerard's wife died on 25th June, 1633, and the bereaved husband may have been stopped for a while, and have been unable to write out his notes before his own death in the autumn of 1634.

*Original Fitzpaine
(Compton)*

(2.)

Under Compton Pauncefoot the author writes : "Compton passed unto Humphrey Keynes heire male of that ancient and notable family of Keynes which I have spoken of at large in my Survey of Dorset." (P. 188.) In the account of Stogursey : "It became the possession of Robert de Fitzpaine, a noble Baron of whom I have spoken elsewhere." The marginal note is : "See at Aukland in Dorsetshire." Also under Luxborough (p. 17) : The family of Everard "by the heire of Bellott Lord of Frome Bellott in Dorset they removed thither, where if it you please you may finde more of them." Under : "South Parrett, North Parrett. The first of these is in Dorsetshire, but, because as I remember I have overpassed it there I will only lett you know that it belonged to the knightly family of Malbancke." (P. 64.)

It is plain that the author of the Somerset Survey had already composed a similar Survey of Dorset, to which he was able to refer his readers, as if they would be found close together. It is quite probable that the two works were originally intended to form part of the series of county histories projected by John Norden in the reign of James I.*

(3.)

It is only natural that these references to family history should also be found in Coker's Survey ; but an examination of the two books brings out such a close correspondence as would be possible only in the case of the work of a single mind. Coker's Survey was printed in 1732 from a manuscript which had no title page, and this defect was common to the other copies then in existence. For a full account of the parallelisms between these two anonymous works I must refer to Mr. Batten's article, which can only be summarized here. They

* Dict. Nat. Biog., XLI., 105. Som. Rec. Soc., XV., intro.

are both referred to as a "Particular Description." They both take the places described not by the local divisions of hundreds, but by following the courses of the rivers and streams. They both have identical and unusual terms and epithets; also peculiar expressions and descriptions. Both books are full of heraldry. Each author committed the same error in making Francis Goodwin Bishop of Worcester instead of Hereford, 1617-34. The Dorset Survey mentions the Earldom of Bristol, which was conferred in 1622; and this date is only eleven years before that of the Somerset Survey. By every test the two books are found to have been composed by the same person.

(4.)

According to the evidence already given, the author lived in Somersetshire; so it is not to be expected that he would give the same personal clues to his identity in the Dorset Survey. The selection of a member of the Coker family seems to rest on the account of their ancestral home at Map-powder, where the author restrains his eulogy on the ancient and respected family by remarking "that it befits me not, being a member of the House, to speak of it." But Thomas Gerard, being a son-in-law, might well consider himself a member of the family; and that he was proud of the alliance is very evident by his causing an heraldic tree of the Coker arms to be painted on one side of the arch in Trent Church to match his own on the other.

There is another personal reference under Tincleton: "Walter Wells left only one daughter, temp. Ed. IV., married unto my predecessor John Gerard." The Episcopal register (of Bristol), under a list headed Incumbents or Lessees, gives: "John Gerarde d. 1576. A vacancy till 1579, during which John Coker often occurs." This is the basis for the theory that John Gerard, who married Miss Wells before 1483, was a clergyman! and incumbent of Tincleton, where he survived

until 1576! Predecessor in both Surveys is used as an equivalent to ancestor; and the alliances in the Gerard shield include the arms of Wells. So this reference is really evidence for the Gerard authorship. John Gerard and John Coker do not appear as clergy in any lists or registers; and it is quite probable that they were simply lay-lessees of the rectorial tithes. Another personal reference is found under Abbotsbury: "The bones of the founder are enclosed in a dainty marble coffin, which I have often seen." Thomas Gerard, as owner of Waddon in Portisham, the next parish to Abbotsbury, had plenty of opportunities to see the ruins, which a resident at Mappowder or Tincleton would not possess. The scanty references to a Coker authorship are therefore shown to be non-existent.

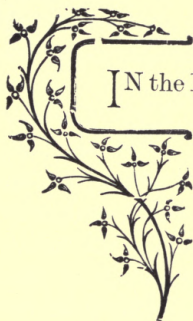
Two difficulties have arisen from this incorrect description of the Survey. The work has been so often referred to under the name of Coker, that a change to Gerard for future citations would involve an unnecessary amount of confusion. The other, almost humorous, is the insertion in the Dictionary of National Biography (Vol. XI., 251) of a life of John Coker, which has to be regarded as a unique instance of a ghost-name in that valuable work.





Dorset "Buttony."

By Captain JOHN E. ACLAND, F.S.A.



IN the Dorset County Museum two sets of hand-made buttons may be seen—one dating back to the early part of last century, from Milborne S. Andrew, and the other a sample of the industry carried on at the present time at Lytchett Minster, Poole.

This button making, or "buttony" as it was termed locally, was an important industry in the eastern parts of the county in former days, until in fact it was driven out of the field by the machine-made article. Through the kindness of Miss M. Mansel, I am able to give some interesting facts about this industry; they were supplied to her by Mr. Samuel G. Case, whose words I shall use as far as possible.

The *clothwork* button was the first to be made at Shaftesbury and neighbourhood at the beginning of the 18th century by Abraham Case. It was made on a round disk with a hole in the centre; the disk was made out of the horns of the Dorset sheep, and a small piece of white rag was fixed on the disk and then worked over; the finer the work the higher the price.

The high top buttons were used for ladies' dresses, and there were flat ones as well, the polishing and finishing off being done at 1s. per gross by four expert women, who could earn 2s. 6d. to 3s. 6d. daily, and have been paid as much as £8 for a month's work.

The wire button was brought out by a grandson of Abraham Case, in the reign of George II.; and another member of the family started the trade at Bere Regis, in the best and most extensive premises in the place. He died in 1758, and was succeeded by Peter Case, who built Case's Street and Clayton Square, Liverpool, on the profits of the button trade.

Towards the end of the 18th Century, Lady Caroline Damer established a school at Milton Abbey for 12 poor children, who were clothed and taught reading, and instructed first in spinning, and afterwards in making buttons, the industry being continued for many years.

The central depôt was established in 1803 at Milborne Stileham, a hamlet of Milborne S. Andrew, by Peter Case, junior, and he was succeeded by his two nephews, George and Henry, the latter being the father of the Mr. Case who furnished these notes. At Milborne (he says) the trade increased stupendously. Depôts were formed at Pydel-trenthide, Hanley, Woolbridge, Langton in the Isle of Purbeck, Iwerne, and Shaftesbury. At Langton and Shaftesbury an agent was kept permanently; at the other places horses were kept to do the journeys on fixed days well known to the workers, who came in hundreds to exchange their buttons for goods and cash.

Buttons were taken at the central depôt, Milborne, on Fridays only, when the place was crowded like a fair. The London office was at 19, Addle Street, E.C., and the agent there did business with England, Ireland, and Scotland, with all the chief cities of Europe, and direct to Quebec, Boston, and New York. This was in the forties, and the office was held for 135 years for no other purpose than the sale of buttons, when the returns were from £10,000 to £12,000 per annum.

The names of the wire buttons were mites, bird's-eye, spangles, shirt, jams, waistcoats, and outsizes, and four different-sized wire. The wires or rings were made from a roll of wire, burned, and twisted on a spindle, the nipped ends put together and soldered by dipping in hot melted solder. This work was done by expert girls or boys called "winders and dippers," and others called "stringers" counted the rings and threaded them in lots of 144. The brass wire was from Birmingham, brought in waggons with very wide wheels, a ton, or ton and a-half, at a load. The price of the best work was 3s. 6d. or 3s. 9d. a gross, and it was done by the Mowlems and other families at Whitechurch, who could make a gross a day.

The lower sorts of buttons were sometimes soiled, and this was remedied by placing them on yellow paper; the next quality on dark blue paper; and the very best were papered on pink. There were about a dozen expert paperers in Milborne—Davises and Lanes chiefly. The papers were had from a paper company in Upper Thames Street, London; some women could earn double as much as others, an ordinary worker earning from 7s. 6d. to 9s. a week.

This flourishing trade was not, however, destined to last, and it is curious that the year of the great Industrial Exhibition in London should have seen the death blow given to the famous Dorset industry. Mr. Case shall relate it in his own words:—

"Perhaps you would like to learn something of Ashton's patent machine button and its disastrous effect on the hand-made button. It was in the year of the great Exhibition (1851) that it was whispered among the people of East Dorset (for there were only a few stray buttoners west of Puddletown), and the smash came at last, 1851-2-3, worse and worse. We employed in wire-makers, paperers, and button workers, from 800 to 1,000; but they were soon in a state of poverty, some starving, and hundreds were sent off to Perth, Moreton Bay, and Quebec by the noblemen of the county; about 350 left Shaftesbury. My uncle and father

dissolved partnership, and in 1849 or 1850 there was on hand a stock of £14,500 worth of goods and buttons ; but my uncle still continued his journeys to the chief towns. Ashton's buttons were becoming known everywhere, but I may state that in March, 1859, I sold in the City £856 worth of wire and cloth worked buttons in five days, all to be delivered within a month of purchase, and that was the last extensive sale of the hand-made button. My father was just upon being ruined, but the lords of the manors of Bere Regis and of Milborne stepped into the breach and saved him."

In reply to an enquiry of my own, last year, the lady in charge of the Mission House, Lytchett Minster, writes :—
"The button-making is done in the cottages as a ' spare time ' employment. We have a depôt in the village at which buttons are purchased, but the greater part of the business is done by post.

"Last year (1912) we sold £38 worth, and paid for workers and material £36.

"When Mr. Case died we bought up all the old buttons, so we have the entire stock."

This industry will, I fear, never again reach its former importance, and the comparison of the £38 worth sold now with the £10,000 worth sold when trade was at its best, is indeed a sad one for the button makers of Dorset.





The Ancient Memorial Brasses of Dorset.

By W. de C. PRIDEAUX, L.D.S., Eng., F.R.S.M.

PART VIII.



THE continuation this year comprises seven brasses, two only being mentioned in *Haines's* list. One is a restored coat of arms, inserted below a rare Norman-French inscription at Long Crichel. For purposes of comparison I give a rubbing of Shakespeare's inscribed stone at Stratford-on-Avon and its partial counterpart at Lydlinch. Two of the inscribed brasses are in the open air on tombs in Loders churchyard ; one, on a flat stone, is much defaced, as might be expected ; the second, on the east end of an " altar " tomb, is in good condition, and for its late period, 18th century, interesting.

I have two costume brasses from Shapwick, Maria Oke in the habit of an order, with lapdog at her feet ; the second, an inscribed effigy to Richard Charnock *alias* Hodgson, Vicar.

Lastly, I show you the Norman-French inscription to John Gouys *c.* 1330. If this date be correct, and there is no reason to doubt it, the little brass is of the respectable age of nearly 600 years.

LODERS, ST. MARY MAGDALENE.

Two in the Churchyard.

- (1.) *Position*.—Fixed by a central brass bolt through the stone to the east end of an altar tomb in a southern direction from the chancel wall.

Size.—10ins. wide by 12ins. high.

Description.—Strong impaling Birt, with the Strong crest above. Strong, *Gules an eagle displayed within a bordure engrailed or*. Birt, *Argent on a chevron gules between three bugle horns sable stringed of the second as many crosses crosslet fitché or*. Crest, *out of a mural coronet or, a demi eagle with wings displayed of the last*. Motto, *The Eagle is Strong*.

On the north and south sides of the tomb are inscriptions to many of the Strong family, dated from 1760 to 1796.

- (2.) *Position*.—Prone upon a marble slab in a southern direction from the chancel wall.

Size.—17½ins. by 12ins.

Description.—A rectangular brass, having in an arched portion above the inscription the crest of Marsh, *out of a mural crown gules a horse's head argent ducally gorged or*. This crest was confirmed to Marsh of Marton and Langden, co. Kent, in 1602.

Inscription.—Underneath lie the remains of | John Marsh of Worth in the parish of | Netherbury Gent. who died Decr. 16th 1765 | aged 60 years, and of Elizabeth his wife | who died Feby. 22nd 1780 Aged 77 years, and also of | George Marsh who died Decr. 25th 1755 Aged | 22 years, Rob Marsh May 1st 1756 Aged 24 | years, And of Richd Marsh Aug. 8th 1759 the | sons of the above named John and Elizabeth

Reader, pause, reflect, amend,
Life has no length, Eternity no end.



Strong.

LODERS.

GOOD S:FORJESUS SAKE FOR BEAR
TO MOVE THE BODIES THAT REST HERE.

R. B. P.
J767

Blackmore.

LYDLINCH.

LYDLINCH, ST. THOMAS A BECKET.

Position.—Hutchins states that the Blackmore brass is in the chancel. I found what I consider to be its lower portion securely fixed within an oak frame on the west wall of the porch.

Size.—21ins. long by $5\frac{1}{2}$ ins. wide. The Shakespeare slab is 33ins. by $8\frac{1}{2}$ ins.

Description.—The upper edge of this fragment is straight, the lower of an ornamental outline, pointing, I think, to the upper portion having been cut away. This piece speaks of bodies, and below has the initials of Richard Blackmore, Priest, 1767. The Revd. S. F. Hooper, who has taken every care of this brass, knows of no other portion. Richard Blackmore* signs the registers of Lydlinch as Rector from 1745 to 1756, and from 1757 to 1767 as Curate; children of Richard and Elizabeth Blackmore were baptised, and some buried, during his incumbency, and it is reasonable to suppose they were buried below the chancel, in a spot formerly indicated by this brass when in a complete condition.

The inscription is very interesting from its similarity to that of Shakespeare on his Stratford slab.

LYDLINCH.

GOOD S^{ir}, FOR JESUS' SAKE FORBEAR
TO MOVE THE BODIES THAT REST HERE.

R.B.P

1767.

* The Registers of Lydlinch, *The Parish Register Society*.

STRATFORD-ON-AVON.

GOOD FREND FOR JESVS SAKE FORBEARE
 TO DIGG THE DVST ENCLOASED HEARE,
 BLESE BE Y MAN Y SPARES THES STONES,
 AND CVRST BE HE Y MOVES MY BONES.

SHAPWICK, ST. BARTHOLOMEW.

- (1.) *Position*.—Now mural on the west wall of north aisle, formerly on the floor of the north or Husey aisle (Hutchins).

Size.—16½ins. high by 16ins. wide.

Description.—A small but fine effigy of Maria, heiress of Lord de Champneys, standing, habited in long gown reaching to the feet, near which a small dog lies, having an ornamental collar around the neck. Possibly in the robes of an order assumed shortly before death. She married, first, Sir William Tourney, and afterwards John Oke in the reign of Richard II. Thomas Oke of New Sarum, whose will is dated 1430 and proved 1434, was perhaps their son.

Inscription.—Hic jacet Maria, heres dom' um de Champneys in Shapwyk ux' Joh'is Oke q'r a'i'ab'z p'piciet d's. Ame'.

- (2.) *Position*.—Now mural on the west wall of north aisle, formerly on the floor of the north or Husey aisle. (Hutchins.)

Size.—14½ins. by 15½ins.

Description.—An inscribed brass having an unusual border with roses at the corners.

This relates to
 the preceding
 case of Maria
 Oke

GOOD FREND FOR IESVS SAKE FORBEARE,
TO DIGG THE DVST ENCLOSED HEARE:
BLESE BE Y^E MAN Y^E SPARES THES STONES,
AND CVRST BE HE Y^E MOVES MY BONES.

Shakespeare.

STRATFORD-ON-AVON.



✠
✠
 Hec iacet maria hirs dominū de Champagnus in
 Shapwick vñ Johis Oke n̄r aīabī p̄uāt d̄s aīc

Maria Oke.

SHAPWICK.

Queris tibi petra: iacet hic in tra johannes 2
 Per petras celices: posceris qd' sit tibi data 2
 Pro culpa uenia: per ipsum sepe peracta 2
 Stultissime iuta: nunc inuidi periculosa 2
 Nunc socii uirtutis: sic iubet uelle diuinum 2
 Sic scis lones: amara tuis omne p' eunt 2
 Sed mat' tui: me uia semp benedicta 2
 Qd' mea delicta: tradantur ut obliuioni 2
 Sic queso da ueniam: ut iudicor inuaculat 2
 Et sic perueniam: mundus ac purificatus 2
 Ergo te rex xpi: percom scis tuis ut me 2
 Angelus angelis: colloret iuta perueni. Amen

John Oke.

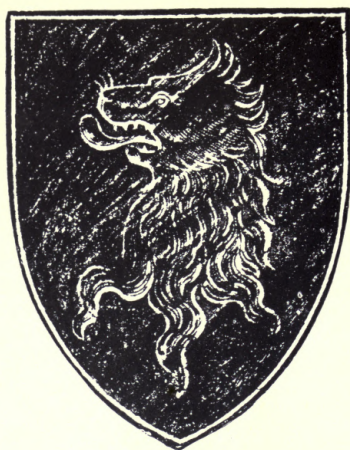
SHAPWICK.



Hic iacet dñs Ricardus Chernok alius Hogelson
quodā vicarius iurisdictionis curie pariet de?

Richard Chernok, Vicar.

SHAPWICK.



Johan Gouys : oft : 100
dieu de l'aine est mrt

John Gouys.
LONG CRICHEL.

Inscription.—

Quercus sub petra jacet hic intra Johannes
 Per preces celices poscens q'd sit sibi data
 Pro culpa venia : per ipsum sepe peracta
 Stultissime vita : nunc mundi periculosa,
 Nunc socii vermes : sic jubet velle divinum,
 Sie sc'is sociis anima Deus omne p'evum
 Celsi mat'roni me viva semp' benedicta.
 Q'd med delicta tradantur ut oblivioni,
 Sic queso da veniam : ut indicet immaculatus
 Et sic permaneam : mundus ac purificatus
 Ergo te, Rex Xpiste, precor s'cus tuus ut me
 Angelus auxilii collocet vita perhenni. Ame'.

(3.) *Position.*—In the chancel near the Communion Table.

Size.—20ins. high by 14ins. wide.

Description.—A tonsured figure of a priest with hands uplifted and joined in prayer.

Inscription.—Hic jacet D^{ns} Ricard' Chernok, alias Hogeson, quondam vicarius istius eccl'ie, cui' a'i'e' p'piciet' De.'

LONG CRICHEL, ST. MARY.

The Church stands in the Manor of Cricchel *Gowis*.

Position.—In the chancel on a grey slab, near the north wall.

Size.—14ins. by 2ins.

Inscription.—

Johan' Gouys gist icy
 Dieu de salme eyt mercy.

Description.—This very early Norman-French inscription has been inlaid in the broader end of a coffin-shaped slab of comparatively modern origin; inserted about its middle is a shield bearing the arms of Gowis or Govis of London. *Argent, a*

lion's head erased gules. John de Govys presented Roger Dobyn to "Longa Kurchel" in 1324. This brass is near this date, c. 1340, when Norman-French was spoken at the English Court. Inscriptions to priests were then for the most part in Latin, the canonical language, while those of knights and ladies were in French, and rarely found after 1420. This is probably one of the oldest brasses in Dorset.

Norman-French inscriptions being rare, we may compare with this example two others, viz., that in the nave of Chinnor, Oxfordshire, late 14th century, being :—

"Adam Rameseye gist ycy Dieu de sa alme eit mercy Ame,"

and that in Hellesdon Church, Norfolk, c. 1360, all being brief but very beautiful in their simplicity—


"Richard de Heylesdone & Beatrice sa feme gisent icy Dieu de lo' almes eit m'cy amen."





Folk-Lore and Superstitions still obtaining in Dorset.

By E. A. RAWLENCE.



IN the remote villages of Dorset, and especially of the Blackmore Vale, a great deal of superstition and folk-lore still lingers amongst the old inhabitants ; but the difficulty is to get behind the scenes in order to find it out, as there appears to be a subconsciousness that such dealings are unorthodox, and possibly some fear of ridicule. In some cases a saying will only drop out when it just illustrates the circumstance. In one instance a farmer illustrated something by an old "saw." Shortly afterwards I asked him to repeat it while I wrote it down, but for the life of him he could not do so. It flowed out naturally enough in its right place. Realising that with the present generation probably all these relics of the past will disappear, and that, with education and the advent of books, papers, and improved locomotion, the time is gone for ever when the children sat round the cottage hearth and heard from "Vather the do'ens an' zay'ens o' gran-ver," about five

or six years ago I set myself the interesting task of trying to fish out and gather up the fragments that remain. My profession gives me unusual opportunities, and perhaps I possess a natural ability to get into the confidence of these old folk, and thus get behind their inner mind, or at some old receipt or charm that is written on a piece of paper in the Family Bible, or hidden in the corner of some drawer. The result of this pleasant inquisition has resolved itself into three heads—(1) Remedies for ailments of man and beast, (2) Old customs and games, and (3) Old saws and sayings.

As the time at my disposal is short, I only propose to deal with some of the remedies affecting poor humanity which I have been able to glean; and if by disclosing these sovereign cures I bring ruin to the dental and medical professions, I tender my humble apologies and regrets. First, let me say that except in one or two instances I propose to use fictitious names for persons and places, as I could not betray these confidences.

In 1907 I obtained, over a cup of tea, the following from a dear old couple. The old lady fished out two charms from the leaves of the family Bible.

To cure toothache—

As Peter was sitting by the river Jordan, Jesus passeth by and He said to Peter, “Why sittest thou here?” and Peter said, “Because I have the toothache.” Jesus saith unto him, “Arise, follow me, and I will heal thee. May it be done to all those that carry these words about them. It shall be even as thou sayest it.”

To make the charm effectual, a lady must write it for a gentleman, and a gentleman for a lady, and the party receiving it must not say “Thank you” for it.

A charm for nose bleeding—

“Let the blood stand still as the waters did in the river Jordan, in the name of the Father, and of the Son, and of the Holy Ghost. Amen.”

To our present minds such statements appear to be somewhat shocking; but behind them lingers a remnant of that

faith which enabled the Apostolic Church to heal all manner of diseases.

The old man then thought that his turn was come, and told me "How that his vather zuffered tar'ble from rheumatics," and that he heard of a wonderful cure which some old man in the neighbourhood had. So he sent two of us boys to get the receipt and take it into Yeovil to be made up. We brought it back and put the bottle on the mantelshelf, where it remained for a long time; and so long as it was there "vather niver had a twing of the rheumatics." But one night we were larkin and at hos' play in the kitchen and knocked the bottle off the shelf and broke it, "and zure enough vather's rheumatics comed back agin." I am sorry that I could not get the ingredients of this wonderful elixir, the very presence of which scared the microbes away.

He also told me "That verdigrease from a pump is an excellent cure for the shingles,"—a highly antiseptic treatment!

The following incident was related to me in 1910 by a leading auctioneer in the county. He had been suffering from the toothache, and on the way to the dentist he met an old farmer client. "Wer' be you gwain?" said he. "To the dentist to have a tooth out," said my friend. "Lor'," said the farmer, "dwont 'e goo there. I'll tell 'e how to cure it. Now you goo to a young w'oak tree and put yer y'arms round it, an' mark the place wher' yer vingers mate. Then het a zlit in the bark wi' yer knife, then put yer left han' behin' yer head and pull out zum hair behin' yer right ear and put it in the zlit o' the bark. Yer 'ill niver have the toothache agin." My friend, being of a very equable frame of mind, ultimately lost his tooth and not his hair.

On Easter Monday, 1910, I was travelling to Abbotsbury, when a quaint old soul got into the carriage, and as she informed me she was on the way to see her daughter, who had presented her with a gran' chil', she was naturally in a very communicative frame of mind. I gathered from her that she was a great believer in the phases of the moon, and

she told me "always to cut my hair, finger and toe nails when the moon is waning, as they will not grow so fast afterwards." She was evidently a great economist of time. She appeared to suffer from her teeth, and told me that when the moon was a'grow'n her stumps stuck up and were painful, but went back when the moon waned. I asked her how she cured the toothache, and she replied that she had been told to "mix zalt wi' water and hold it in her mouth till it boiled." She had tried it, but could not keep the water in her mouth long enough to make it boil, "zo of course her toothache wer niver cured."

Only recently I obtained a similar sort of negative cure from North Dorset, as follows :—

"Get an honest lawyer's pocket handkerchief,
Wash it in an honest miller's millpond,
Dry it and iron it with an honest tailor's goose.

If you can do that you will never have the toothache again."

Returning to my old South Dorset friend, I asked if she could cure warts, and she gave me this receipt :—"Steal something and rub it on the wart, then throw it over the left shoulder and bury it, and tell no one." I suggested that one might get into trouble by stealing, but she replied, "Oh ! not money ; a pea or bean or piece of meat will do."

She also gave me a cure for boils : "Find a place where you can cover seven or nine daisies with your foot. Then pick and eat them." I suggested that they might be dirty after having one's foot on them. She replied, "Ther', yer must eat so much earth avore yer dies." As we drew near to her destination, I asked whether she believed in these old cures. "Bless 'e," said she, "they be a lot better than doctor's stuff."

Another cure for warts from North Dorset—

Find a snag bush in a hedge, then walk backwards to the bush and pick a snag over your left shoulder. Bite it in half and rub the wart with it. Then throw the snag away over your right shoulder, and tell no one.

At a house in King Stag, just north of the Blackmore Vale Dairy, one John Buckland is said to have lived about fifty years ago. He was known as Dr. Buckland, and his name is cut with a diamond on a very old pane of glass in the bedroom window. He held what was known as a "twoad vair," which took place, so far as I could make out, at the change of the moon in the month of May, and was for the cure of persons affected with the king's evil, running or tubercular wounds. Dr. Buckland collected a large number of toads, and the affected person had to open his or her clothing on to their bare chest. The doctor then seized a toad, cut off its head, and popped the writhing body into a muslin bag, which was dropped down the chest of the patient and suspended round his neck. If the patient endured the shock of the cold toad and "the scrablen'" of its legs in its death throes, he would be healed; but if he "turned," *i.e.*, became faint or nauseated under the experience, he would die.

Only just before Christmas I came in contact with one of Dr. Buckland's patients, who lived near Wincanton, so far had the doctor's fame reached. A farmer told me that when he was a child he had running sores on his legs, and he was not expected to live. As a last resource, he told me that he remembered being sent in a "butter cart" (*i.e.*, a small tilted cart which the farmers' wives went to market in) to a noted doctor at Buckland Newton who practised "the twoad cure," and he remembered seeing a box full of toads which the doctor had, and his seizing one and treating him as before described. This farmer is now about sixty, and, in his child mind, he had evidently confused Dr. Buckland with the village of Buckland Newton, which is about three miles to the west of King Stag. Any way, my farmer friend is now a most robust and energetic man, weighing hard on twenty stone, and a living witness to the efficacy of Dr. Buckland's "twoad cure."

Farmer Jones, who lives in North Dorset, is a great believer in a wise woman who lives at C. H., and has a great reputation in all the country side.

Some years ago my friend was coming down a ladder with a pack of hay on his head, and fell backwards. In doing so his foot slipped between the rungs of the ladder and got terribly twisted. For weeks he was laid up, and had to go on crutches. One day I called at his farm and found him walking across the yard with a stick. I said, "Hallo, farmer! What has cured you?" "Well," he said, "I had tried all the doctors, and they couldn't cure me, so I went to the Wise Woman. I couldn't go myself, so I sent Mrs. B., who was the wife of a neighbouring cottager, and had been under treatment by the Wise Woman. I asked what she did. "Well," said he, "she sent word that old Jimmy Snook had an evil eye on me because I didn't gee' him enough cider, and that I was to get rid of him; and she sent some bay leaves which I was to boil and wrap my foot in tight on going to bed, and the next morning I could walk across the yard with a stick." "How about Jimmy Snook?" said I. "Well," said he, "he's worked on the farm for fifty years an' more, and I have ge'en him the zack lots o' times, but he wont go." I expect Jimmy got his extra allowance of cider, and he died not long after. Possibly his death was accelerated by this extra allowance! The Wise Woman must have got at Jimmy's existence and weakness through Mrs. B., who either had a spite against the old man and wanted him to be turned out, or else it was "a plant" between her and Jimmy to get the extra allowance of cider.

I discussed the merits of the Wise Woman with Farmer Jones, and he observed a smile on my face and remarked, "I zee you don't believe in her. I do. These wise 'oomen be all very well zo long as they does good; but if they has an evil eye on yer I'd burn 'em, that I would," and he wrung his fist in the air, and the fire which of old condemned the witch to the faggots clearly flashed out of his eyes.

On another occasion Farmer Jones told me that he had a very bad and swollen knee and leg—so bad that he could not get up into his trap without help. As he had tried three doctors with no result, he decided to try the Wise Woman

again. She examined his leg as he sat in the cart, and then went into her cabin and made up some herb lotion which she rubbed in well, and told him that by the time he got to the next village he would be well enough to get out and have some refreshment at the publichouse. A tempting suggestion of which he was able to avail himself, and by the time he got home he was nearly well; a few more applications of the lotion completely cured him.

Yet another time my friend suffered terribly from eczema in the arms, especially during the Spring and Autumn. So bad was he that he could not feed himself. Again he resorted to the Wise Woman, and said to her, "Look'e here, missus; if you can heal this yer ex'ma, I'll gee yer vive pounds." She gave him some herb ointment, and he told me that three pots completely cured him. Before fulfilling his pledge he waited until the Spring to see if it would break out again, but "zure enough it didn't; zo I puts the old 'oss into the trap and droved over to C. and said, 'Look'e yer, missus; I be comed to pay yer the vive pounds I promised 'e if yer cured my ex'ma,' " and he tendered the five pounds, but the old lady would only take a pound.

Farmer Jones also informed me that the Wise Woman always picked her herbs at midnight on a full moon, as they were more potent then.

Last Autumn my son passed the old lady's cabin, and in the road was a patient sitting in a cart, evidently too bad to get out, and the Wise Woman was standing in front of the trap with her back to him, making great flourishes in the air with a willow wand, probably exorcising some demon. But after all it will be seen that the real cures come from the herb remedies, and that suggestions about an evil eye and flourishing the willow wand are only adjuncts to play on the ignorance of her patients.

Such are some of the superstitions and arts that still linger as quaint and interesting remnants of the past, but of which the next generation will probably be ignorant, unless some record of them is made.



Fifth Interim Report on the Excavations at Maumbury Rings, Dorchester.

Committee :

H. Colley March, M.D., F.S.A., *Chairman.*

John E. Acland, F.S.A., *Hon. Sec.*

W. M. Barnes
J. G. N. Clift
J. M. Falkner
R. H. Forster

* J. C. M. Mansel-Pleydell
H. B. Middleton
* H. Pentin
Alfred Pope, F.S.A.

C. S. Prideaux
W. de C. Prideaux
* N. M. Richardson

* *Executive Body, Dorset Field Club.*



THE Committee have much pleasure in presenting the Report of the work carried out in the Autumn of 1913, written by Mr. H. St. George Gray, who, as in former years, directed the excavations, and has recorded, with his accustomed accuracy and completeness, all essential facts that have come to light.

The thanks of the Committee are offered to all those who have subscribed to the funds, and also to those who have assisted by lending material and appliances, especially to the Town Council of Dorchester, Messrs. Lott

and Walne, Mr. Slade, and Mr. Foot. We wish to mention also the great help afforded by Mr. Sebastian Evans and Mr. C. S. Prideaux, who were constantly present on the ground.

The expenditure of the season's work amounted to £111 9s. 11d., and the receipts to £96 3s. 2d. A balance of £26 3s. 11d. was brought forward from 1912, out of which the expenses incidental to the publication of this Report will have to be paid.

The facts that we have learnt of the original form and construction, as well as of the complicated history, of Maumbury Rings are highly important, and amply justify the series of excavations now, for a time, brought to a close.

It may be possible in the future—

1. To ascertain whether or not the Outer Ditch completely encircles the Earthwork; how it terminates at the N. Entrance; and when and for what reason it was constructed.

2. To examine the breastworks on the top of the Great Bank, and to explain their purpose and that of the Civil War terraces.

3. To discover more relics of a definite character in the Great Bank; and to determine its actual summit in Roman times.

4. To extend the diggings in front of "the Den;" and to connect those between Cuttings XXX. and XXXI. as well as between Cuttings II. (Extension) and XXXI.

5. To complete our knowledge of the prehistoric Shafts as to their relation to the Great Bank; as to their absence at the N. Entrance and in the Arena; and as to whether Shafts IV. and XVII. are themselves simple throughout, or are each the joint opening of smaller shafts, lower down, in close order.

Meanwhile, we await with interest the result of the exploration, now in progress, of the pits at Grime's Graves.

Signed on behalf of the Committee,

HY. COLLEY MARCH.

27th February, 1914.

SHORT REPORT ON THE EXCAVATIONS OF 1913.

By **H. ST. GEORGE GRAY.**

BRIEF DESCRIPTION OF THE PLATES ACCOMPANYING THIS REPORT :—

PLATE I.—Sketch-plan of Maumbury Rings, similar to that given in the former Reports, the position of the 1913 excavations (Cuttings XXX. to XXXV. inclusive and two narrow cuttings parallel to the transverse axis) having been added. It shows the relative position of the cuttings made in 1908, 1909, 1910, 1912, and 1913, but the scale is too small to attempt to show structural details. The position of the Well is seen in Cutting XXXIII., and Shafts XII. to XVII. on the E. side of the central area. It should be noted that a dotted circle, passing through the middle of the shafts, and having a diameter of 169ft., has been described on this plan.

PLATE II.—General view of Maumbury Rings (September 24th), taken from the top of the Great Bank, looking S.S.E., and showing the excavations of 1913 in progress. The W. terrace is seen in the foreground, and on the opposite side the whole length of the E. terrace. The planks and windlass represent the position of the Well (Cutting XXXIII.). On the left the excavation of Cutting XXXI. is in progress; and further south Cutting XXX., the largest excavation made during the whole of the investigations, including the digging into the Great Bank. The photograph shows the horizontal stratification of the material forming the Civil War Terrace, the solid chalk arena wall (with strut-holes on the top), and the oblong enclosure recessed into the "wall."

PLATE III., FIG. A.—Cutting XXXIII., the Well, taken from the N., September 17th, 1913. The spade rests on the solid chalk arena

THE RELATIVE POSITION AND NUMBERS OF THE PREHISTORIC
SHAFTS ARE INDICATED IN WHITE ON BLACK.

MAUMBURY RINGS

DORCHESTER

PLATE I.
L. & S. W. RAILWAY

SKETCH-PLAN
OF THE
AMPHITHEATRE
SHOWING THE
POSITION AND
EXTENT
OF THE
CUTTINGS,
1908-1913.

LONG AXIS

A R E N A

TRANSVERSE
AXIS

SCALE OF FEET



CUTTINGS XXII TO XXIX
EXCAVATED 1912.

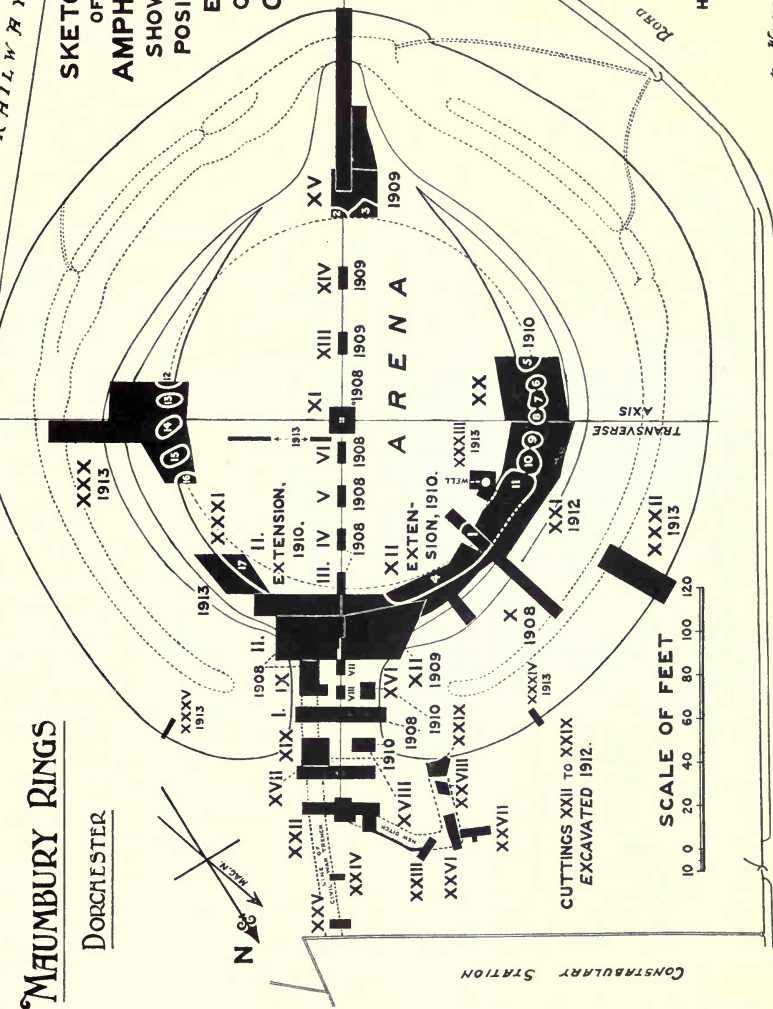
CONSTABULARY STATION

W E Y M O U T H A V E N U E

to W E Y M O U T H

H. ST. GEORGE GRAY,
JANUARY 1914.

From Dorchester



which had been cut through subsequently for the purpose of sinking the well (4ft. in diam.). This view shows the steps, or foot-holds, cut into the S.S.E. face of the Well; there were thirteen steps on each side. The Well was apparently never completed, the bottom being reached at a depth of 27ft. below the surface of the turf. Owing to previous mutilation of the solid chalk the mouth of the Well was "steaned" with Purbeck stone slabs on the N.W.

PLATE III., FIG. B.—Cutting XXX., taken from the slope of the Terrace, looking S.W. (September 24th, 1913). The view clearly shows the upper margin of the mouths of Shafts XII., XIII., XIV. and XV. (counting from the S. end). On the right the solid chalk arena-floor is seen, and on the left part of the platform of the enclosure which was about 1·5ft. lower than the arena-floor. The Inner and Outer Trenches are seen in section at the S. end, and in the foreground part of the Outer Trench cut into the solid chalk at the foot of the "wall."

PLATE IV.—Cutting XXX., on the E.S.E. side of the Rings, taken from the N.W. on October 2nd, 1913, at the close of the excavations, and after the whole of the solid chalk in the cutting had been laid bare. The upper figure stands on the solid chalk below the Great Bank; and the lower figure on the platform of the enclosure recessed into the arena-wall. Along both sides of this area post-holes are seen, and at the S. end a recess in the wall. Strut-holes can be traced on the top of the wall on both sides of the photograph, and in the foreground the extreme E. margin of the line of shafts. The old turf line under the Great Bank is clearly defined; also the oblique seams of rubble forming the earthwork, and the horizontal stratification of the Civil War Terrace.

PLATE V.—Cutting XXXII., outside the Great Bank on the N.N.W., October 3rd, 1913. This view, taken from the N.N.W., shows the stratification of the seams forming the earthwork. The old turf line, at a max. depth of 15ft. below the crest, is clearly defined, and below it the natural solid chalk is seen. The large lumps of chalk in the foreground (left-hand side) were obtained from the earthwork. At the foot of the bank a trench, apparently of modern construction, is shown re-excavated, and the nature of its loose filling is seen on the face of the cutting.

I.—INTRODUCTORY REMARKS.

In our last report reference was made to the unfinished exploration of the amphitheatre known as "King Arthur's Round Table" at Caerleon. It was hoped that a fund of £500 might be raised to purchase the site, complete the excavations, and put the walls of masonry into such a state of repair as to enable them to withstand the weather.

Unfortunately the Caerleon committee has been dissolved, and the scheme is in abeyance.

Beyond the city wall at Caerwent and on its N.E. side, as noted in our last report, a structure was discovered in September, 1912, which was at first thought to be a second Roman amphitheatre, but later explorations show it to be a round temple enclosing an octagonal structure.*

In connection with the pre-history of Maumbury—its shafts, &c.—we look forward to the results of the systematic excavations which are being carried out at the Grime's Graves, Weeting, Norfolk, by the Prehistoric Society of East Anglia. The Grime's Graves consist of 254 saucer-shaped depressions which are the mouths of shafts excavated in the chalk rock. One of these shafts was excavated by Canon Greenwell in 1870, and found to be 39 feet deep with galleries at the bottom. Among the objects discovered were seventy-nine red-deer antler picks (all below 17ft. from the surface), more or less complete, a ground axe of basaltic stone, cup-shaped vessels of chalk supposed to be lamps, and a well-made chalk phallus (now in the British Museum).

As director of the excavations, I had the pleasure of continuing the work at Maumbury in 1913 from September 4th to October 4th (the filling-in being completed subsequently). The sub-Committee, consisting of Dr. H. Colley March, F.S.A. (*Chairman*), Captain J. E. Acland, F.S.A. (*Secretary*), Mr. J. Meade Falkner, Mr. C. S. Prideaux, and Mr. W. de C. Prideaux,

* *Archaeologia*, LXIV., 447—452.

rendered me most valuable support.* These antiquaries were frequently on the ground, and their assistance from time to time in the general organization of the investigations and overlooking of the workmen was extremely helpful to the director.† Mr. Sebastian Evans, who did much for the 1912 excavations, offered his assistance, which was readily accepted and greatly appreciated. Mr. C. S. Prideaux again rendered the Committee great service by lending his camping outfit, and although he could not be present during the whole of the operations this season, his interest in the work was as keen as ever.

The director has held himself responsible, as in former years, for the recording of the work, the preparation of all the plans, sectional drawings and photographs,‡ as well as the care and repair of the relics discovered. Help in the matter of identifying natural history specimens has been kindly rendered by Mr. Clement Reid, F.R.S., Mr. E. T. Newton, F.R.S., and the Royal Botanic Gardens, Kew.

In conjunction with this, the Fifth Interim Report, subscribers are recommended to read the previously published papers on the subject, to enable them to interpret the full significance of some of the details of structural interest; they are published in the *Proceedings, Dorset Field Club*, and also issued separately. The sketch-plan (Plate I.) is intended merely to show the general outline of "the Rings" and the relative position of the thirty-five cuttings which have been made.

* Since the last series of excavations in 1912 the Sub-Committee has lost a valued Member in the person of the Rev. C. W. Whistler, who died at Broadway on June 10th, 1913.

† A maximum number of ten men was employed for the excavations, with John Lush as foreman.

‡ Subscribers may see the full series of photographs (1908-1910, 1912, and 1913)—considerably over 100—on applying at the Dorset County Museum.

II.—SOME GENERAL OBSERVATIONS.

During the season the investigation of the Well (Cutting XXXIII.), the N.W. margin of which had been found at the close of the excavations in 1912, was completed (Plate III., A). It appeared to have been sunk in the XVII. Century by the Parliamentarians, who, fearing the loss of their usual water supply, evidently decided to sink a well inside the earthwork. It was never finished, and it is probable that circumstances did not necessitate its completion.

We had hoped that time would have permitted us to open up the arena-wall and the inner and outer trenches on the E. side, from the "transverse axis" to the E. end of Cutting II. Extension near the N. Entrance. But the excavation of Cutting XXX. (Plate I.) entailed such an enormous amount of labour that only a comparatively small digging (No. XXXI.) could be made adjoining Cutting II. Extension, the intermediate ground, left untouched, covering a maximum length of 38·75ft.

The usual structural features were revealed in Cuttings XXX. and XXXI., the former digging including the removal of the large quantity of material which filled an enclosure recessed into the arena-wall—an area of similar dimensions to the corresponding one excavated on the opposite side of the Rings in Cutting XX. (1910). A line of five shafts was also investigated in Cutting XXX. (Plate III., B). All these features will be described in their proper place.

But, perhaps, the most important work of 1913 was that carried out with a view of ascertaining the date of the Great Bank enclosing the shafts and arena. For this purpose the excavation of Cutting XXX. (Plate IV.) was continued towards the E.S.E. as far as the middle of the crest of the encircling earthwork, and a similar cutting (No. XXXII.)

was made half-way through the Great Bank on the N.N.W. from the outside of the Rings (Plate V.). In both these cuttings the old turf line was found to be clearly defined at a depth of 15ft. below the crest of the bank, and in Cutting XXXII. it was slightly higher than the general level of the field on the N.W. at the present day. As a trench—apparently of late date—was found at the foot of the bank in Cutting XXXII. (Plate V.), two small excavations were made on the N. and E.N.E. (Cuttings XXXIV. and XXXV., Plate I.) to ascertain if this trench continued round the earthwork. It was clearly defined in both these places.

There is strong negative evidence that the Great Bank is of the same date as the shafts. The few relics found in the two cuttings are such as have been obtained in the shafts, and nothing which could be definitely assigned to the Bronze Age, or the Late-Celtic or Roman period, was revealed in this part of the investigations. Not a single object was obtained from the actual surface of the old turf, but in Cutting XXX. an antler pick (No. 395), of the same type as those found in the shafts, was uncovered about 1ft. above the original surface; and in Cutting XXXII. an antler rake (No. 412) was obtained within 0·75ft. of the old surface, and a burr and lower part of a red-deer antler (No. 394) only a foot above the same level. Fragments of antler were met with in two other positions in the body of the earthwork, and a piece of carved chalk of circular section (No. 409), similar to other carvings of the same character found in the shafts.

As long intervals have occurred between our excavations, and as these were filled in after each season's work, it has been no easy matter to determine whether or not the solid chalk arena was cut down to a dead level; but perfect accuracy does not appear to have been achieved. It is now found that the greatest deviation from the horizontal (as ascertained from the parts excavated) is from the S. corner of Cutting XX. to the E. end of Cutting II. Extension (Plate I.),

the fall from W.S.W. to E.N.E. being 1·32ft.* On the other hand a level of the floor taken close to the Well (Cutting XXXIII.) on the N.N.W. agrees exactly with the arena-floor at the S. end of Cutting XXX. on the E.S.E., but some of the intermediate levels taken varied to the extent of 0·85ft. Again, it was ascertained in 1908 that from the centre of the arena to the N. Entrance there was a gradual fall of 0·75ft., whereas the floor was found to be level from the centre up to the margin of the so-called "den" on the S.S.E. The lowest part of the arena appears, therefore, to have been between Cutting II. Extension and Cutting XXX.

In speaking of the Roman work it may also be recorded here that the enclosed platform of solid chalk in Cutting XX. on the W.N.W. was 1·15ft. *higher* than the nearest part of the arena-floor, whereas the corresponding platform in Cutting XXX. on the E.S.E. was 1·5ft. (average) *lower* than the adjacent arena. The maximum dimensions of each of the enclosed platforms were 15·75ft. by 11ft. The so-called "den" (Cutting XV., 1909) measured 17·5ft. by 13·5ft., and was absolutely level with the adjacent arena-floor.

From the excavation of Cutting X. (1908) on the N. and Cutting XXX. (1913) on the E.S.E., it has been clearly shown that the vertical depth from the old turf line under the Great Bank to the adjacent arena-floor is 11·75ft.; and as the average depth between the old turf line and the solid chalk was found to be 2ft. in Cuttings X., XXX., and XXXII., it is evident that a depth of 9·75ft. of virgin chalk was removed in the central area subsequently to Neolithic times, and presumably by the Romans.

As Plate I. shows, the position of seventeen shafts has now been determined, and a dotted line has been indicated on

* The stratification of the chalk rock dipped from N.N.W. to S.S.E.

this plan showing that the middle of each shaft is on the line of a true circle having a diameter of 169ft. Using the same centre * it is found, from Mr. Feacey's plan, that the general line of the crest of the Great Bank is practically a circle with a diameter of about 276ft., and the diameter of the outer boundary of the earthwork is about 335ft.

The arena-floor, on the other hand, is a wide oval with diameters of 192·5ft. and 158ft. (measured from the inner margin of the "inner trench"), and the outside dimensions of the earthwork including the bulge at the S.S.W. are 345ft. on the long axis and 335ft. transversely. Within the margin of the solid arena no trace of a shaft has been found, although several small cuttings have been made partly with the intention of testing this point.†

Assuming that the prehistoric shafts existed before the solid chalk of the central area had been lowered—and the arena-floor is estimated to be 11·75ft. lower than the original ground level—it appears quite evident that, *at the surface*, they did not originally take the form of pits at all. It is the opinion of the director that in the position of these shafts, in prehistoric times, there existed an immense circular trench, or ditch, having a medial diameter of about 169ft. Judging from the excavations in Cutting XXX. and elsewhere, this ditch was probably some 16ft. deep below the original surface, and perhaps something like 40ft. wide at the top.‡

* The centre of the 169ft. circle is at a distance of about 10ft. S.W. of the central picket in the arena used for surveying purposes.

† These cuttings were Nos. III., IV., V., VI., XI., XIII., XIV., XXXIII.; also two small unnumbered cuttings between Cutting XXX. and the centre (*vide* Plate I.).

‡ It is possible that these dimensions may have to be altered to some extent. The approximate width at the top is given on the assumption that the counterscarp of the fosse was at a very much steeper pitch than the escarp; but if the inclination of the escarp and counterscarp did not vary much, then there must have been a decided berme between the earthwork and the fosse.

Estimated by the average slope of the sides of the shafts it is evident that they could not have shown themselves on the original surface as pits, and, indeed, it is seen by a glance at the plan and sections that the mouths of the majority of the shafts united below the level of the arena-floor. Had we re-excavated the long hollows, called Shafts IV. and XVII., to a greater depth, it is probable that they would have been found to divide into several pits.

It appears, therefore, that a large circular fosse was originally cut to obtain material to form the encircling bank, and that shafts of various shapes were sunk from the bottom of this trench. On the other hand it is possible that the shafts may have been excavated first, and before any regular bottom of the fosse was cut.

We have nothing further to add with regard to the purpose of the shafts since the last part of Section V. of the 1912 Report was written, beyond what is mentioned above. It is not known how long they were left open; but it is evident that they were not filled in by ramming (except just at the mouths), as the rubble was found to be very loosely compacted. There can be no doubt that more chalk was excavated from the shafts than found its way back into them. The additional material might have been used to increase the height of the earthwork.

In the former reports the depth of the shafts has been given as measured from the nearest part of the arena-turf. Now that the old surface line under the Great Bank has been exposed in three places, it is possible to give their approximate depth below the original surface of Neolithic times. On these lines it is estimated that the average depth of the seven re-excavated shafts was originally 35ft., whilst their average depth below the nearest arena-turf of the present day is exactly 27ft.*

* The same depth as the unfinished Well.
(Cutting XXXIII.).

No. of Shaft.	Year of Re-excavation.	Approx. depth in feet below former surface.	Depth in feet below nearest arena-turf.
I.	1908	36·4	30·0
VI.	1910	32·8	24·5
IX.	1912	36·8	28·5
X.	1912	33·8	25·5
XI.	1912	36·3	28·0
XIV.	1913	33·6	25·8
XV.	1913	34·5	26·7

The Roman settlers at Dorchester, feeling the need of an amphitheatre outside their walls, and finding prehistoric Maumbury in a suitable position, appear to have adapted this site to their requirements, lowering the central area to convert it into an arena and leaving the virgin chalk *in situ* for the core of the boundary-wall. There can be no doubt that they found the prehistoric trench open, or rather only partly silted up, and in some cases the upper part of the mouths of the shafts would still be open. This is proved by the fact that in the rammed chalk in the opening of the shafts, and below the level of the arena-floor, we have constantly found Roman remains mixed with broken antler picks and flint implements of Neolithic type. The Romans had not only to cut out their arena-floor, but to make good the surrounding ground excavated by the former race by means of rammed and puddled chalk, which in places, as would be expected and as we found, had sunk over the position of the shafts below the level of the solid chalk arena. As yet there is no proof that the Romans increased the height of the Great Bank, which has, no doubt, from natural causes, somewhat shrunk during the many centuries of its existence.

The Civil War terraces, which were placed against the prehistoric bank and on the Roman deposits, have been described elsewhere.

There are features at Maumbury which resemble Avebury, and the interior fosse in both cases may have been intended for the same purpose, perhaps to prevent animals and the ordinary people from trespassing on a spot reserved for ceremonies conducted by privileged people. The forthcoming excavations at Avebury (Easter, 1914), both into the fosse and vallum, may result in strengthening a comparison between these two prehistoric enclosures.

III.—CUTTING XXXIII.

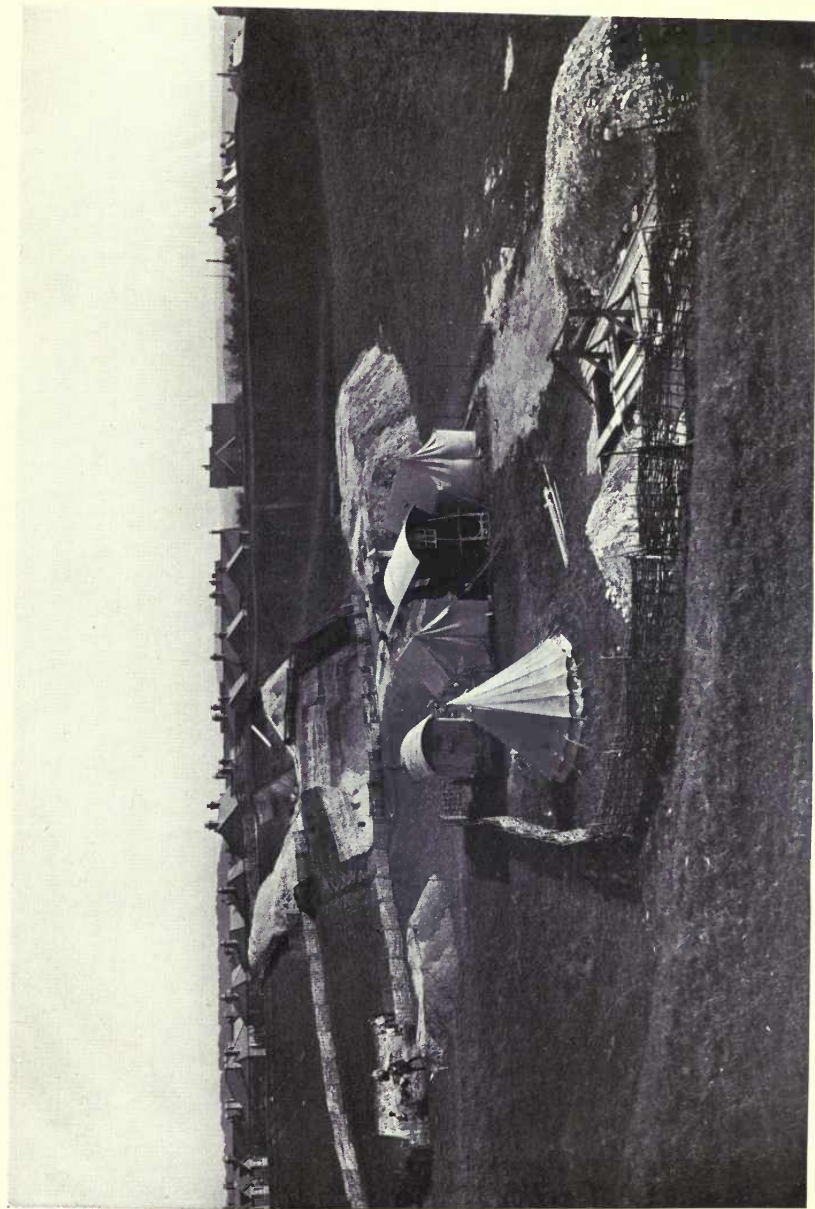
THE WELL (PLATES I., II., AND III.).

This cutting, which measured 12ft. by 9ft., partly overlapped a small extension of Cutting XXI. (1912). On the E., S., and W. the Roman arena-floor was reached at an average depth of 3·4ft. below the surface. The floor was more or less stained, as in other places, owing to long exposure during the use of the site as an amphitheatre. The surface was rather rough, but covered with the "shingle" previously described.

In the N. corner of the cutting, solid chalk was reached at a depth of 6·3ft. and had the appearance of being fresh cut. In the central area, on the E., S., and W., it was also found that the ground had been cut out to a greater depth than the arena-floor, a chalk "wall," 1·75ft. in height, connecting the Roman and more recent levels. (Plate III., A.).

On digging deeper in the centre, where loose filling existed, the mouth of a circular shaft, or well, was revealed, having a diameter of 4ft. In clearing this area a few fragments of pottery (one piece glazed) were collected, none of which was earlier than the XVII. Century.

On the N. side of the shaft some slabs of Purbeck limestone were uncovered (Plate III., A.), and they were found to continue round its margin towards the W.N.W. for a distance of 3ft. (rather more than a quarter of the circumference of the



MAUMBURY RINGS, DORCHESTER, 1913. GENERAL VIEW OF THE EXCAVATIONS.
(Full Title given at the beginning of the Report).

From a Photograph by Mr. H. St. George Grady.

hole). It was observed that the well was "steaned" only in the position where the solid chalk had been cut to a depth of 6·3ft. The width of the steaning was about 1ft., and what remained was built in four courses, the bottom being 6·75ft. below the surface. The stones on the inner edge were trimmed to conform to the circular shape of the well. It was found that the shaft extended downwards with the same diameter of 4ft.

At a depth of 8ft. below the well's mouth a typical fragment of glazed stoneware of the Bellarmine type (No. 338) was found. At 12·5ft. a piece of red earthenware with a dark brown glaze (No. 339) was obtained; this was of the same type as the *albarello* (No. 295) found in the New Ditch (Cutting XXIX.) outside the N. entrance, and referable to the middle of the XVII. Century. At 14ft. three glazed shards and an iron horse-shoe nail (No. 341) were found—also modern.

At this stage in the operations we temporarily stopped the re-excavation, but ultimately decided to obtain some builder's men, a windlass and other tackle (Plate II.) to pursue the work further.

Two pieces of black pottery (No. 379) were found at a depth of 14·3ft. below the well's mouth. One fragment is modern; the other I am inclined to regard as Romano-British, but a single fragment of Roman pottery where the whole country teems with such shards affords no evidence of date by itself, and it might easily have become mixed with the material used for filling the well. The iron nail (No. 382), depth 19ft., has a decidedly modern appearance.

At 15ft. below the mouth of the well the pieces of chalk rubble became very large, and at 16ft. Purbeck slabs began to be found and continued to the bottom. About eleven dozen of these stone slabs were afterwards counted, and most of them were shaped, one edge being slightly concave. From this fact it was evident that at one time the mouth of the well was steaned more extensively than it was when we found it, and it is possible that the stones originally extended all round the mouth.

Nodules of flint were occasionally found in the filling down to 19ft. The chalk increased in moisture at the lower levels, but even at the bottom it was not really wet. To test the true bottom the solid chalk was cut away with a pick-axe to a thickness exceeding 6ins.

Resting on the bottom of the well, thin ironwork (No. 386) was found in a fragmentary condition. Some of this was thin sheet iron bent over to double the thickness. Three pieces resemble thin door-hinges in form; three other pieces are of stouter material; these have rivet-holes at more or less regular intervals, and some of the rivets still remain, to many of which oak adheres. In some places a coarse woven fabric is seen between the wood and iron. These remains do not appear to have formed part of a bucket.

Conspicuous features in the structure of the well were the steps, or footholds (Plate III., A.), which occurred in vertical order on opposite faces, *i.e.*, on the N.N.W. and S.S.E., thirteen steps on each side. On the N.N.W. the lowest step was 2·2ft., and the lowest step on the other side 3·2ft., from the bottom of the well. The steps in both lines were at somewhat irregular distances apart, but the average was 1·55ft.; their average size was—Depth, 5ins.; height, 5ins.; width, 9ins.

The bottom was reached at a depth of 27ft. below the surface, and 21·85ft. below the solid chalk margin of the mouth of the well.

There can be little doubt that this well was sunk in the troubled times of Charles I., when Maumbury was a Parliamentarian fort. All the relics, with perhaps one exception, appear to be of the XVII. Century. It is highly probable that the Parliamentary forces, fearing the loss of their usual water supply, decided to sink this well, and it would appear that circumstances did not after all necessitate its completion. It is not likely that water was found at so high a level, and no silt, or any other soft material, was found at the bottom.

MAUMBURY RINGS, DORCHESTER, 1913.

A.



THE WELL, CUTTING XXXIII.

(Full Titles given at the beginning of the Report).

B. PLATE III.



MOUTHS OF PREHISTORIC SHAFTS, CUTTING XXX.

From Photographs by Mr. H. St. George Gray.

IV.—CUTTING XXX.

(PLATES I., II., III., AND IV.).

This was by far the largest cutting which has been made at Maumbury. Its position is on the line of the transverse axis and on the E.S.E. side of the Rings. It extended from the E. margin of the arena through the highest part of the Civil War terrace, and half-way through the Great Bank to its crest (Plates I., II.). The horizontal length of the cutting, in the direction indicated, was 63ft., and the width on the curve of the arena about 47ft. The margins in other directions were irregular and governed by the structure revealed as the excavations proceeded. At this spot the highest part of the terrace is 12·7ft., and the crest of the Great Bank is 22·9ft. above the arena-turf.

The arena-floor was reached at the S.W. end of the cutting at a depth of 3·75ft. below the surface, and at the N.W. end 4·35ft. Not far from the W. margin a fine chalk rubble occurred at the floor level, and it soon became evident that shafts of a similar character to those discovered in other cuttings also existed here; and the W. half of their openings gave the edge of the solid arena-floor a sinuous outline (Plate III., B.).

In removing the chalk rubble and other filling, the following relics were discovered, the great majority of them being of the Roman period :—

337. A large number of shards of black Romano-British pottery found spread over a small area just under the turf. Much of it has burnished line ornament, including the common lattice pattern.

340. Globular bead of light grey colour formed from a fossil hydrozoon, *Porosphaera globularis*. Found in the upper Roman mould. A similar bead was found in 1910 (No. 175), and has been figured. About three dozen of these fossils were collected from various parts of Cutting XXX. and at different depths; but very few of them had been bored for use as beads.

342. Piece of brilliant bluish-green vitreous paste, probably part of a tessera. Found in the Roman area.

343. Third brass coin of Tetricus II., A.D. 268-273. Depth 3.5ft.

344. Bronze fibula, the pin detached (and found at some little distance off); length 59mm. (*Illustrated*). It has a thin, slightly arched bow, wide at the head and gradually tapering towards the nose. Found in the Roman deposits over the platform. The brooch is of a type common in S.W. Britain.

345. Iron arrow-head with one pointed barb remaining; socket broken; length 52mm.; much corroded. (*Illustrated*.) Found near No. 344. Another arrow-head of iron (No. 335) was found in Cutting XXI.

346. Tessera of pale grey-coloured stone. Depth 2.6ft.

347, 348. Two pieces of cut chalk with deep parallel scorings. Found just above the level of the arena-floor.

349. Part of a handle of dark brown earthenware, Romano-British; of angular form, and ornamented with two deep parallel grooves. (*Illustrated*.) Found in a similar position to Nos. 347, 348.

350. Roughly formed disc made from a piece of thick red tile, diam. $3\frac{1}{4}$ ins. Depth 3.4ft.

351. Fragment of human skull. Depth 3.3ft.

352. Third brass coin of the third century; British imitation of a Roman coin of Claudius Gothicus (or one of the Gallie emperors), A.D. 265-270; of the "Pax. Aug." type. Depth 3.3ft.

353. Fragment of thin *terra sigillata*, unornamented. Found between Shafts XII. and XIII., 1ft. below the level of the arena-floor.

354. Three fragments of lathe-turned Roman pottery, of light terra-cotta colour; unornamented. Found between Shafts XIV. and XV., 1ft. below the level of the arena-floor.

355. Part of a well-worn whetstone; square section. Found near No. 354.

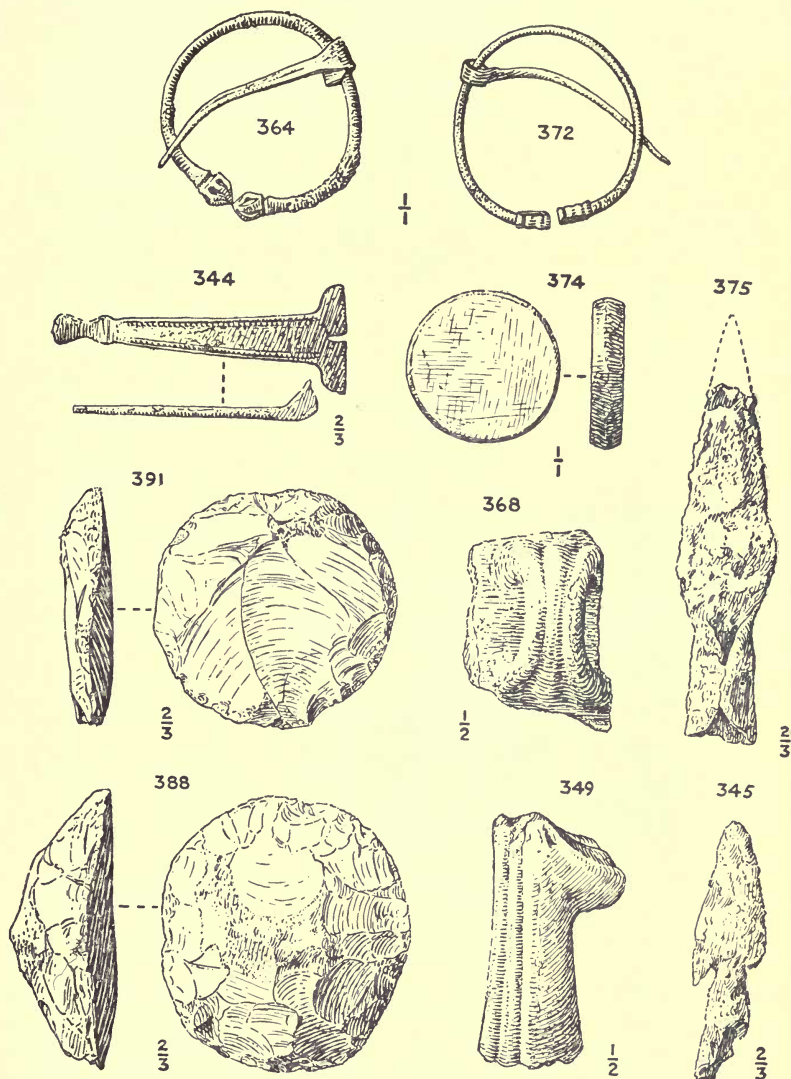
356. Stone tessera of a greyish-green hue, about $\frac{1}{2}$ in. square. Found in the mouth of Shaft XIII., depth 7.5ft. below the surface.

358. Two fragments of coarse pottery of Romano-British type. Found with part of an antler pick (No. 357) at the top of Shaft XIII., 3.1ft. below the level of the arena-floor.

362. Two fragments of a light-coloured mortarium. Found over Shaft XIV., depth 4.5ft. below the surface.

363. Base of a Roman amphora, of a reddish buff colour. Found over Shaft XIV., depth 4ft. below the surface.

364. Penannular brooch of bronze, with bulbous terminals, ribbed obliquely; arched pin. (*Illustrated*.) Found over Shaft XV., depth 4.3ft. below the surface. This form of terminal is rarer than the turned-back terminal so common in S.W. Britain.



RELICS FOUND AT MAUMBURY RINGS, 1913.

(All found in Cutting XXX.)

344. Bronze Fibula. 345. Iron Arrow-head. 349. Handle of pot, Roman.
 364, 372. Penannular Brooches of bronze. 368. Pottery handle, Romano-British. 374. Stone Counter. 375. Iron Spear-head. 388, 391. Flint Scrapers.

(From Drawings by Mr. E. Sprankling.)

365. Handle of black earthenware of a saucer or other vessel, with a vertical groove as ornament; the aperture is almost circular; of a common Dorset type. Found with a piece of imitation Samian pottery, depth 2·8ft.

366. Piece of skull bone (probably human) and a piece of Romano-British pottery. Found at the top of Shaft XVI., depth 7·4ft. below the surface.

367. Fragment of *terra sigillata*, bearing traces of galloping horses as ornament. Depth 3ft.

368. Handle of dark brown pottery, similar to No. 365, but ornamented with two vertical grooves; the aperture is of D-shaped form. (*Illustrated.*) Found near No. 365.

369. Part of a sharpened bone implement, similar to No. 175 found in 1910. Depth 3·2ft. It closely resembles a number of implements found in the Lake-villages of Somerset.

372. Penannular brooch of bronze of a common S.W. type, in good preservation and finely patinated; the loose pin is slightly arched; turned-back terminals, moulded and grooved transversely. (*Illustrated.*) Found over Shaft XV., depth 3·8ft. below the surface. A similar brooch (No. 98) was found at Maumbury in 1909, and has been figured.

373. Fragment of fine grey pottery of sandy texture, with yellow glaze on the outside; probably Roman. Depth 2·5ft.

374. Counter, or draughtsman, of light grey-coloured stone, with smooth flat faces; diam. 20·5mm. (*Illustrated.*) Depth 3·4ft.

375. Small iron spear-head, with short socket formed by hammering over the metal; point missing. (*Illustrated.*) Depth 3·6ft.

376. Skeleton of a dog, described with the animal remains.

381. Iron staple—a spike terminating in a ring; length 4½ins. Found on the platform.

383. Uninscribed British coin of bronze, of a degraded type common in Dorset; somewhat defaced. Found in the Outer Trench, depth 4·5ft. below the surface. Another specimen (No. 406), burnt, slightly bent and somewhat defaced, was found just above the arena-floor (depth 1·8ft.) in the narrow cutting between Cutting XXX. and the middle of the arena. A third example (No. 269) was found in Cutting XXI. (1912).

384. Part of a "tazza" with overhanging flange, of a reddish-buff ware; Roman. Found 2ins. above the platform.

385. Several fragments of one or two vessels of very thin *terra sigillata*. Found a little to the W. of the platform and just above it.

387. Part of a human skull, including the right meatus auditorius and mastoid process. Found with Roman remains at the top of the filling of Shaft XIV.

388. Discoidal scraper of flint, chipped, of Neolithic type; diameters 49mm. and 53·5mm. (*Illustrated.*) Found at the top of the filling of Shaft XIV., in association with Roman remains.

389. Piece of lathe-turned armlet of Kimmeridge shale. Found 0·5ft. above the arena-floor.

390. Fragment of a handle of a vessel of Romano-British pottery, ornamented with three grooves on the line of the handle. Found 1ft. above the arena-floor.

391. Discoidal scraper of flint, of Neolithic type, well formed and chipped; of circular outline, diam. 48mm. (*Illustrated.*) Found near the scraper, No. 388.

407. Head of a human femur. Found on the solid chalk ridge between Shafts XIII. and XIV., and at the bottom of the Inner Trench.

413. Iron nail, length $2\frac{3}{4}$ ins. Found in a post-hole in the Outer Trench.

Charcoal, fairly well preserved, was collected from three places among the Roman deposits, including one spot 0·35ft. above the platform. All this charcoal was examined by Mr. Clement Reid, F.R.S., and proved to be oak.

Comparing Cuttings XX. and XXI. (1910 and 1912) on the W.N.W. side of the arena with Cutting XXX. (1913) on the opposite side, very few structural features were disclosed. In clearing away the many tons of material from the old surface on which the Civil War terrace had been raised, the usual number of shards and other objects (mostly of the XVII. Century) were collected, including part of a glazed tile (No. 361) and about $13\frac{1}{2}$ dozen bullets of lead (No. 336) found under the turf in the middle of the slope of the highest part of the terrace, spread over an area some three yards in diameter, few of them being found at a greater depth than 0·5ft.

Judging from the condition of these bullets (many being considerably flattened) they had been discharged from a gun or pistol. From those in good condition it is ascertained that they vary in diameter from 14·5mm. to 18·5mm. They seem to afford evidence of target practice, the shots being fired probably from the corresponding terrace on the W. side. The director having recently seen similar bullets from Naseby in Warwick Museum, asked Lieut.-Colonel A. Leetham, Curator of the Royal United Service Institution, to compare the Maumbury bullets with some in his charge, and he reports that the

Dorchester specimens are similar in shape and size to the examples from the battlefields of Naseby and Marston Moor and the siege of Athlone, and he sees no reason why they should not be of the Charles I. period. "The calibre of the bullet varied considerably, as did the musket of that day; but as a matter of fact the shape of the bullet did not vary until the Brown Bess went out, and indeed the round bullet was in use up to the time of the Crimean War. Mr. ffoulkes' solution may be the correct one, as the pistols of the XVII. Century were of large and varied calibres, and there are such weapons in the Institution's Museum which would take either of the two bullets you send."

Mr. Charles ffoulkes, F.S.A., Keeper of the Tower Armouries, who has seen some of the Maumbury bullets, wrote :—"The bullets are more probably pistol bullets, as all the arquebuses that are at the Tower are of much larger calibre. In the XVII. Century the pistol was fired at point blank; some writers advised 'touching the enemy's breast-plate with the pistol before it was discharged.' If your find is of different calibre it would bear out the theory that they are for pistols, as each regiment had as near as possible the same calibre of arquebus for obvious reasons. The disadvantage of having pieces of different bore was found in Elizabeth's reign, when the 'caliver' was introduced to give uniformity."

After the removal of the terrace the top of the solid chalk arena-wall was soon disclosed, also the outline of an area deeply recessed into the wall, which proved to be an enclosure of similar character and proportions to that found on the opposite side of the Rings. (Plates III., IV.). By degrees the floor of the enclosed area, bounded on three sides by chalk walls and open towards the arena, was cleared, and in carrying out this work a good number of relics and shards of the Roman period were collected. The platform was found to be smooth and well worn, but there was a decided fall from front to back amounting to 0·7ft. Owing to the presence of shafts and the consequent disturbance of the chalk rock in this position the W. margin of the platform was somewhat irregular. The dimensions, however, were exactly the same as the W. enclosure, viz., length 15·75ft., width 11ft.

Along both sides and at the foot of the wall of the enclosure were two trenches, that on the S. 6·75ft. and that on the N. 6ft. long; they were 1·1ft. deep below the platform and



MAUMBURY RINGS, DORCHESTER, 1913. EXCAVATION OF CUTTING XXX COMPLETED.
(Full Title given at the beginning of the Report).
From a Photograph by Mr. H. St. George Gray.

of an average width of 1·2ft. at the top (Plate IV.). At each end of the trench there were single post-holes, one D-shaped, one round, and two square. All of them were 1·85ft. deep below the platform. These trenches correspond exactly with those found in the W. enclosure. The chalk wall at the back of this area reached a height of 10ft.; the lower half stood at an angle of about 80°. There was no trench at its foot, nor was there one at the foot of the corresponding wall in the W. enclosure. A deep recess of semi-circular section penetrated the wall at the W. end of the S. trench; this recess extended to a height of 3·9ft. above the floor. Its base was 0·3ft. above the platform, whereas the bottom of the similar recess in the S. wall of the W. enclosure (Cutting XX.) was 2ft. above that platform. If the posts in the S. side-trenches carried hoardings these recesses would have been obscured.

Near the top of the arena-wall to the N. of the enclosure three and to the S. two strut-holes were noted, and they were of a similar form to those found elsewhere in previous years. (Plates II., IV.).

Owing to the existence of shafts between the arena-wall and enclosure and the nearest part of the solid arena-floor, the inner and outer trenches, which bounded the arena in all parts of the Roman amphitheatre, were very difficult to trace in this cutting, for the reason that they had been almost entirely cut in the rammed filling above the mouths of the shafts, and indeed no part of the inner trench had sides or bottom of solid chalk. Here and there the outer trench penetrated the solid chalk (see foreground, Plate III., B.), but even in those places its sides were composed of rammed chalk in the upper parts. The average width of the gangway was 3ft. (as elsewhere), and the average width occupied by both trenches was 7·2ft. No post-holes could be traced in the inner trench, but in the outer trench two circular post-holes were noted at the S. end of the cutting, a square one in the middle of the front of the enclosure, and five square ones at the N. end.

From this cutting, in conjunction with others, it appeared probable that long before the existence of the enclosure and the inner and outer barriers, there was a prehistoric trench of large proportions between the arena-wall and the solid arena-floor on the line of the shafts discovered. This cutting added five more pits to those previously known, viz., Shafts XII., XIII., XIV., XV., and XVI. (Plate III., B.). Only part of the N. margin of Shaft XII. was traced at the S. end of the cutting; of Shaft XIII. * the N. and S. margins were cleared (giving a width of only 3·75ft.); of Shaft XVI. at the N. end only the S. margin could be determined. But the outlines of Shafts XIV. and XV. in the central part of the cutting were entirely re-excavated.

Shaft XIV. (Plate I.).—This was of an irregular oval form, the long diameter, 12ft. at the mouth, being E. and W., the short diameter 6·75ft. (The mouth of this shaft is seen between the platform and the surveying post, Plate III., B.). It was found to be 25·8ft. deep below the nearest arena-turf, and 33·6ft. below the old turf line under the Great Bank. Towards the bottom it was of circular section with diameters of 4ft. at 9ft., and 3·1ft. at 1ft., from the bottom. At higher levels the rounded section had a flattening on the W. The bottom was basin-shaped, but not quite true, being slightly deeper on the S.W. than on the N.E. The chalk rubble filling of this shaft was moister than in any of the other pits re-excavated.

Besides the antler pick (No. 402), depth 9ft., and an antler rake (No. 392), depth 6·5ft. below the arena-turf, a few other fragments of antler were found at a depth of 8·5ft. Below this very little was discovered until, at a short distance from the bottom, a fine rounded nodule of flint about 5½ins. in diameter was brought to light. Within a foot of the bottom a pick formed from the antler of a slain red-deer (No. 405) was discovered; the skull part was slightly charred,

* In the mouth of this shaft part of a pick (No. 357) and the point of an antler tine (No. 359) were found.

the bez- and trez-tines were carefully reduced to stumps, and the brow-tine bore evidence of considerable wear. Below this a little burnt matter and charcoal (too fragmentary for preservation) were observed; and a large lump of chalk (No. 408), length 7ins., scratched with deep parallel incisions, with a tapering hole penetrating one surface to a depth of $1\frac{1}{8}$ in., and having a diameter of $1\frac{1}{8}$ in. at the top.

Shaft XV. (Plate I.).—This pit was of similar form to Shaft XIV., having at the mouth a long diameter of 14ft. from E. to W. and a short diameter of 8ft. from N. to S. (The W. end of its mouth is seen in the foreground of Plate III., B.). It was found to be 26·7ft. deep below the nearest arena-turf, and 34·5ft. below the old turf-line under the Great Bank. At 6·2ft. from the bottom there was a definite constriction in the walls of the shaft with a steeper pitch to the base; the diameter at this point varied from 3·2ft. to 3·5ft. The bottom was very smooth, basin-shaped, and quite circular in section, the diameter at 1ft. from the base being only 1·7ft. Nodules of flint in the filling—tried or otherwise—were not plentiful.

Parts of the crown of two antlers (No. 370), one bearing traces of fire, were found in the mouth of the shaft, depth 6·2ft. (the following depths are below nearest arena-turf); and at a depth of 7·6ft. portion of the antler of a slain red-deer (No. 377). At 5·2ft. an antler pick (No. 380), in a weathered condition; and at 11ft. some pieces of burnt antler and fragments of decayed oak (No. 397) were obtained. At 4·7ft. from the bottom, an antler pick (No. 399) in good condition was found; it bears clear evidence of cutting in various places, presumably with stone tools. At 1·2ft. above the bottom an antler pick (No. 400), considerably damaged, was uncovered; the beam is very massive, having a maximum circumference of 165mm. between the bez- and trez-tines; circumference just above the burr about 206mm. Within 2ins. of the bottom the crown of an antler (No. 401) of two points was found, somewhat abnormal and flat; it was stained by fire like No. 400.

Above and below the pick (No. 400) a large mass of fragments of charred antler was revealed, some of the pieces being far more calcined than others; one or two fragmentary animal bones were also found here, and a good deal of blackened wood (not true charcoal). This was identified at the Royal Botanic Gardens at Kew as hornbeam (*Carpinus betulus*). It is said that this tree is now rare in Dorset, though an undoubted native.

Four pieces of flint, much calcined, were found in the mouths of some of the shafts, viz., No. 360 in Shaft XIII., Nos. 393 and 414 in Shaft XIV., and No. 371 in Shaft XV.

In the 1912 Report it was recorded that a remarkable carving in chalk was found in the filling of Shaft X., which perhaps affords further evidence of phallicism in early pre-historic times. This season two somewhat similar objects of chalk were discovered. No. 409 is mentioned in the description of Cutting XXXII. into the earthwork. The other (No. 378) was found in the mouth of Shaft XV., and consists of a piece of carved chalk of circular section, broken at both ends; diam. at larger end $2\frac{1}{2}$ ins., tapering to $2\frac{1}{8}$ ins. at the other end.

Excavation of the Great Bank (Plates II., IV.).—At the same time as the excavation of the enclosure and shafts was in progress, men were employed in penetrating the Great Bank (to the middle of its crest) on the line of the transverse axis. This part of the cutting was 10ft. wide at the top, a considerable batter being necessary to keep the sides standing as the digging was continued downwards.

The upper part of the Civil War terrace, which had to be removed, was composed chiefly of chalk rubble, closely compacted and with horizontal stratification. The maximum thickness of this material, measured vertically, proved to be 5·8ft.; and the width of the whole terrace (at its highest part), measured horizontally, was 33ft. Below it the old surface covered in the XVII. Century was clearly defined, and its junction with the turf at the E. margin of the terrace was quite distinct.

The excavation of the earthwork was carried down in all parts to the surface of the solid chalk ; in the contour of the latter there was a considerable amount of irregularity at the W. end, the difference in level being accounted for by a hole, or shelf, in the solid chalk (maximum depth 2ft.), which extended across the cutting from N. to S. (Seen at top of the ladder, Plate IV.) From this hole to the E. end the level of the solid chalk varied to the extent of 1·5ft. As in Cutting XXXII. into the outer part of the Great Bank on the N., the ancient turf line in Cutting XXX., of dark brown unctuous mould (max. thickness 0·5ft.), stood out in marked contrast with the chalk rubble of which the greater part of the earthwork was composed. A length of 25ft. was uncovered, and its surface deviated from a straight line to the extent of 0·75ft. The old surface (represented by a black line in Plate IV.) was discovered at a depth of 15ft. beneath the crest of the bank. Below it the chalk rock was reached at depths varying from 1·65ft. to 2·35ft. Near the E. end, instead of finding undisturbed rubble under the old surface line, dark mould for a length of 7·3ft. extended down to the chalk rock ; no relics were found in this material, and it did not appear to have any special significance, and was probably natural. In one place a dark patch of old turf was met with at a level of 2·2ft. above the old surface line.

The stratification of the chalk rubble and mould forming the body of the bank was extremely interesting, as may be seen on the S. side of the cutting in Plate IV. In the middle there were layers of fine and coarse chalk rubble alternating with narrower seams of mixed mould and fine rubble ; these seams were inclined towards the E. at an angle of about 35°. This feature provided an object lesson as to the manner in which the material was thrown up, or carried up in baskets.

At the W. limit of the Great Bank there was a difference in the soils, and the original bank appeared to have been disturbed as far inwards as the old surface line was found to begin. Here (on the S. face of the cutting) the section of what appeared to be a small trench, or ledge, filled with a

fine silt of mixed mould and rubble, was observed and plotted; but, as no relics or pottery were found, no definite evidence of date was obtained.

Nothing was obtained from the body of the bank except a few bones of young pig (*Sus scrofa*) near the top, and an antler pick (No. 395), with the handle-end incomplete, found in an important position 1ft. above the old turf line. It is a small shed antler of red-deer with the brow-tine fairly complete, and the bez- and trez-tines cut down as stumps. The pick is smooth and bears signs of considerable wear, and is of precisely the same type as those found in the prehistoric shafts.

We obtained no conclusive evidence of the date of the Great Bank; but the fact that few remains were found here and in the similar digging on the N.N.W. (Cutting XXXII.), and that nothing of Roman date was found in either of these cuttings, points to the probability that the earthwork is prehistoric and contemporaneous with the accompanying shafts.

V.—CUTTING XXXI. (PLATE I.).

Cutting XXXI. was a quadrilateral area (seen on left-hand side, Plate II.), the sides measuring from 20ft. to 23·75ft. in length. Its N.W. corner abutted against the S.E. margin of Cutting II. Extension. The digging revealed the usual features, viz., the material forming the Civil War terrace resting upon an old surface which covered the Roman and earlier work, the chalk wall of the arena, and the inner and outer trenches with the solid gangway between. On the S.W. the outline of a large shaft (or shafts?), bearing the number XVII., came to light. In the rubble filling at the mouth no prehistoric remains were found, but we examined the material no deeper than 8·15ft. below the surface of the turf.

The E. margin of the pit was practically in the same position as the inner edge of the inner trench. Square post-holes were revealed in two places on the margin of the shaft, one filling the centre of a basin-shaped cavity in the solid chalk.

In the inner trench, which was 2ft. deep below the 3ft. gangway, a circular post-hole was noted. On the arena-wall two strut-holes were found, and two others further S. were traceable. The wall was uncovered under the terrace to a height of 5ft. above the gangway.

On clearing the outer trench of rubble it was found to have an average depth of 2·2ft. below the gangway. In it the position of six post-holes (mostly rectangular) was clearly traced, the second from the N. being situated in a basin-shaped depression in the bottom of the trench. The post-holes were by no means equi-distant, but they were on an average 3·3ft. apart.

The outer trench was not continuous throughout, and between the second and third post-holes from the N. there was a decided ridge of solid chalk rising from the bottom of the trench. The bottom of the trench terminated at a distance of 3ft. from the S. end of the cutting, and it gradually sloped up to the level of the gangway at 1·7ft. further S. The discontinuity of this trench was not noticed elsewhere in the excavations.

There was a comparative paucity of relics in this cutting; the unnumbered finds in the Roman deposits included a few iron nails, a stone and an earthenware tessera, and three pieces of *terra sigillata*. The numbered objects were as follows:—

396. XVI. Century Nuremberg counter, Hans Kravwinekel. Depth 2ft.

403. Third brass Roman coin, burnt and unidentifiable. Depth 4·5ft.

404. Long iron nail, bent, with large thin head. Found on level of the arena-floor.

VI.—CUTTINGS XXXII., XXXIV., AND XXXV.

(PLATES I. AND V.).

Cutting XXXII. was made through the outer half of the Great Bank on the N.N.W., and was 35ft. in length by 12ft.

in width. At the N. end the digging was begun 5ft. beyond the foot of the rampart; from this point the bank rises to a height of 17·4ft. The old turf line was found to be clearly defined for a length of 18·5ft., its max. thickness being 0·25ft. It consisted of a dark brown unctuous mould, without any admixture of chalk. Below its surface the solid chalk was reached at depths varying from 1·8ft. to 2·3ft. The vertical height of the earthwork above the old surface line (clearly seen in Plate V.) was 15ft.

The turf-mould was seldom found to be more than 6ins. thick, and below that most of the thrown-up material consisted of chalk rubble, streaked with mould of different colours; some of the lumps of chalk were very large.

No relics were found on the old turf line, but at 0·75ft. above it an antler rake (No. 412), of a type found in the shafts, was uncovered. The objects found were as follows :—*

394. Burr and lower part of a red-deer antler. Found about 1ft. above the old surface line.

398. Point of a red-deer tine, well worn. Found in the body of the earthwork. Depth 4·75ft. below the surface.

409. Piece of carved chalk of circular section broken at the smaller end; diam. 2½ins. tapering to 2¼ins.; present length, 2½ins.; similar to Nos. 309 and 378 described elsewhere. Found 2·5ft. above the old surface line.

411. Burr and part of beam of an antler, much weathered. Found 10·6ft. below the surface.

412. Rake, consisting of the crown of an antler of three points; also a piece of decayed oak (C. Reid). Found 0·7ft. above the old turf line.

In digging the bank at the N. end the outline of the top of a ditch was noticed on both faces of the cutting (Plate V.). On removal of the silting, it was seen that a trench had been cut into the solid chalk subsequently to the formation of the Great Bank, the latter having been considerably scarped in

* A piece of burnt skull-bone (probably human) was also found in the body of the earthwork.



MAUMBURY RINGS, DORCHESTER, 1913. CUTTING XXXII.
STRUCTURE OF THE GREAT BANK ON THE N. N. W.

(Full Title given at the beginning of the Report).

From a Photograph by Mr. H. St. George Gray.

the construction of the ditch. Unfortunately no relics were found in the filling—which appeared to be a comparatively modern accumulation. At the level of the old turf line this ditch was about 7ft. wide, and extended to a depth of 2·5ft. below the level of the chalk rock ; the ditch was 1·75ft. wide at the bottom.

At the W. end of Cutting XXIX., as mentioned in the 1912 Report, a trench, having a width of about 3ft. at the bottom, was traced for a length of 5ft. running at a level of 1·7ft. higher than the New Ditch which terminated against the earthwork. This record, taken in conjunction with the line of the trench in Cutting XXXII., led us to make a small intermediate cutting (No. XXXIV., measuring 8·6ft. by 3·3ft.) on the N. and against the foot of the Great Bank (Plate I.). Here we found a trench cut to a depth of 2·6ft. in the solid chalk, 6ft. wide at the surface of the chalk rock, and 1·9ft. wide at the bottom. The bottom was 2·85ft. lower than the floor of the trench in Cutting XXXII. (S.W. side) ; the natural fall of the ground was in the same direction. No relics were found in the filling.

To test the matter further, another cutting (No. XXXV.), measuring 10ft. by 2ft., was made in a similar position on the E.N.E. side of the Rings, and here again a trench was found now covered by the foot of the Great Bank. It was 4ft. deep below the solid chalk, with a width of at least 8ft. at the same level, and 1·8ft. wide at the bottom. At a depth of 1·3ft, were found close together a head and neck of a human femur, a metal ferrule of a stick, and a piece of thin black pottery of Romano-British type (No. 410). These remains are hardly enough in themselves to date the trench ; and, as pointed out elsewhere, the presence of odd fragments of pottery of the Roman period affords no definite evidence of date, being constantly found mixed with disturbed soil. The ferrule, however, brings us to much later times, and seeing that modern remains were found in Cutting XXIX. and in other parts of the New Ditch, the probability is that the trench under consideration is of Cromwellian construction.

Time did not permit of testing its existence at other points, but it will probably be found that this trench encircles the Great Bank.

VII.—ANIMAL BONES.

All the bones found in the Prehistoric Shafts have been preserved ; also a selection from the Roman deposits. The greater number of those found in 1913 have been kindly identified by Mr. E. T. Newton, F.R.S. The following are the most interesting (excluding implements of red-deer antler) :—

CUTTING XXX.

Remains of Toad (*Bufo vulgaris*). Depth unrecorded.

ROMAN DEPOSITS.

Jaw of Field Vole (*Microtus agrestis*).

Lower jaw of small slender Dog (*Canis vulpes*), size of Arctic fox.

SHAFT XV., ROMAN FILLING.

Metacarpus of Ox, length 197mm., giving estimated height of 3ft. 10 $\frac{3}{4}$ ins. at shoulder.

SHAFT XVI., ROMAN FILLING. Depth 6·9ft. below the surface.
Skeleton of Dog (*Canis familiaris*), estimated height at shoulder 1ft. 9ins.

FROM THE BODY OF THE GREAT BANK, NEAR THE TOP.

Young Pig (*Sus scrofa*)—vertebræ, humerus, two astragali, two calcanei.

CUTTING XXXI.

IN POST-HOLE WITH IRON NAIL.

A few bones of small Fox.

ROMAN DEPOSITS.

Polecat (*Mustela putorius*)—complete lower jaw and two humeri.

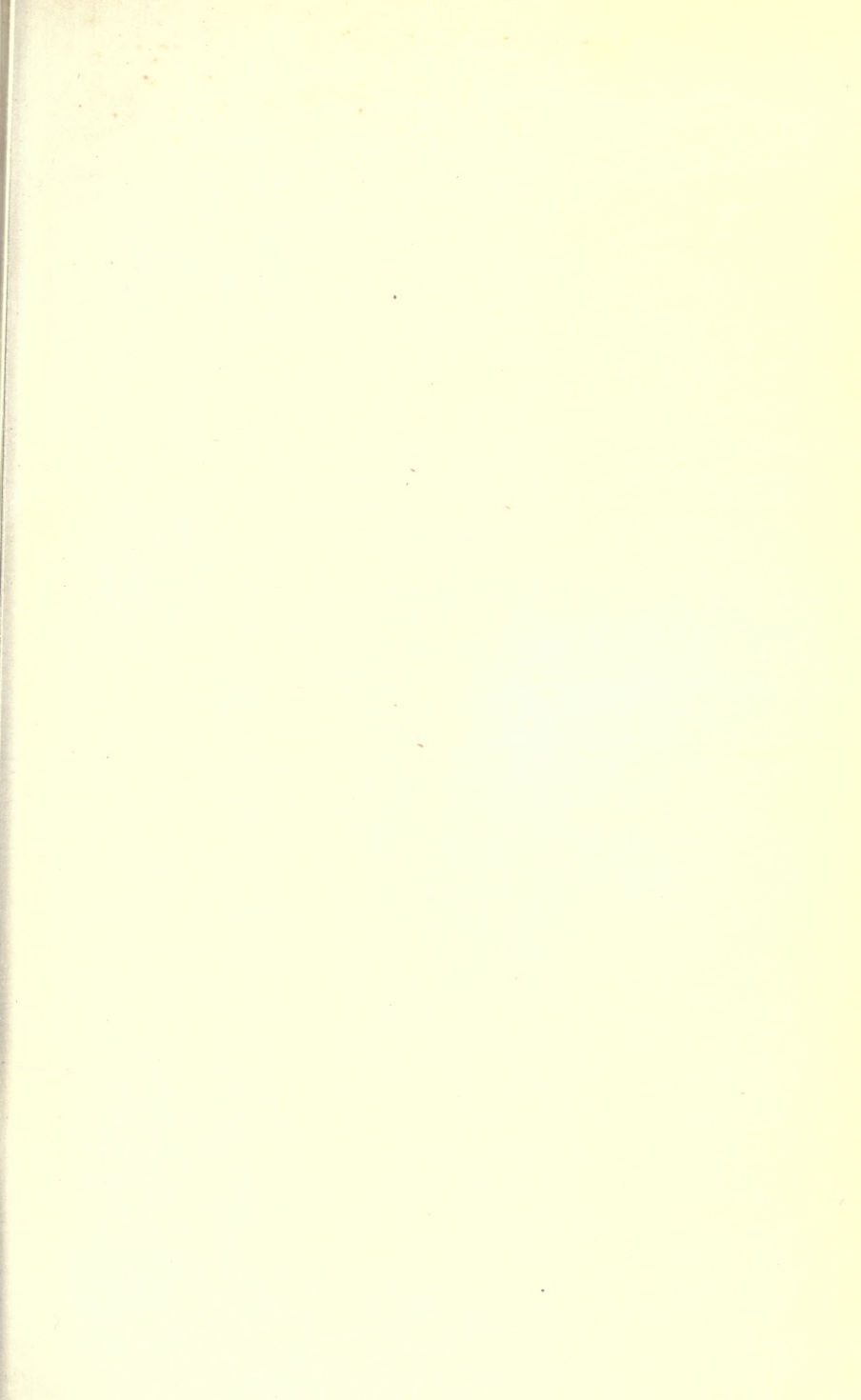
Small Dog (*Canis vulpes*)—parts of two lower jaws.

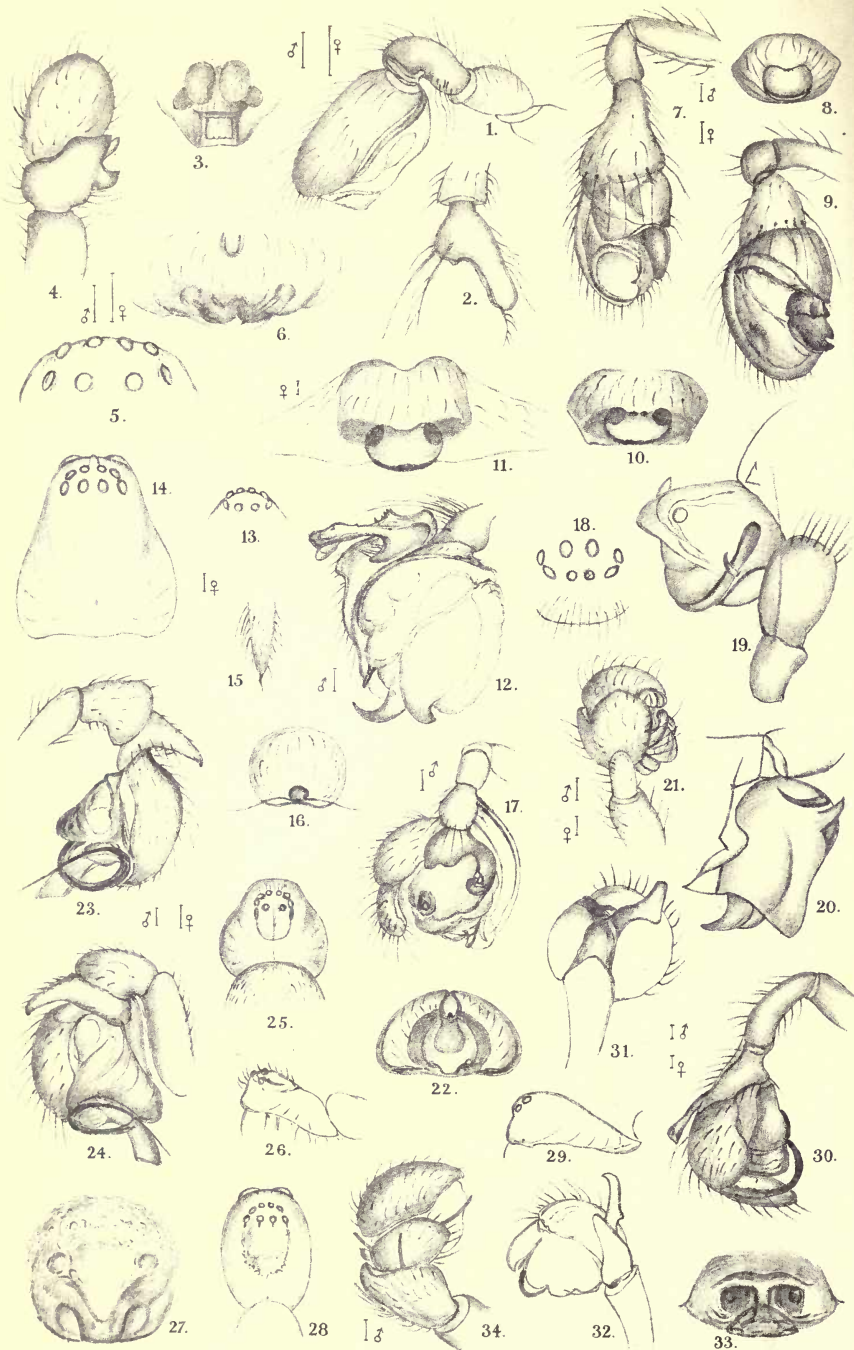
CUTTING XXXII.

IN BODY OF THE GREAT BANK IN CHALK RUBBLE.

Ox,—parts of ribs.

Red-deer (*Cervus elaphus*)—Three or four pieces of antler.





O. Pickard-Cambridge del.

M^r Farlane & Erskine, Lith. Edin^g

EXPLANATION OF PLATE A. Figures 1—34.

- Clubiona juvenis*, Sim. Fig. 1. Left palpus of male from outer side ; 2. Ditto in front ; 3. Epigyne of female.
- Clubiona subsultans*, Thor. Fig. 4. Right palpus of male from above and behind ; 5. Eyes of male from above and behind ; 6. Epigyne of female.
- Phyllonethis instabilis*, Cambr. Fig. 7. Left palpus of male from outer side ; 8. Epigyne of female.
- Phyllonethis bellicosa*, Sim. Fig. 9. Left palpus of male from outer side ; 10. Epigyne of female (from Ben Nevis) ; 11. Epigyne of female (from St. Kilda).
- Leptyphantes Carrii*, Jackson. Fig. 12. Left palpus of male from outer side ; 13. Eyes from above and behind.
- Robertus scoticus*, Jackson. Fig. 14. Cephalothorax of female, from above and behind ; 15. Extreme joint of palpus showing the terminal joint and palpal claw ; 16. Epigyne.
- Porrhomma Thorellii*, Hermann. Fig. 17. Left palpus of male from rather in front on outer side ; 18. Eyes from in front.
- Opistoxys subacuta*, Cambr. Fig. 19. Part of palpal organs of male from above and behind ; 20. Ditto from outer side and above (drawn by Dr. Jackson).
- Coryphæus mendicus*, L. Koch. Fig. 21. Right palpus of male from above and behind ; 22. Epigyne of female.
- Maso Brittenii*, Jackson. Fig. 23. Right palpus of male from outer side. 24. Left palpus of male from outer side ; 25. Cephalothorax and eyes of male from above and behind ; 26. Profile of male (cephalothorax) ; 27. Epigyne of female.
- Tiso æstivus*, L. Koch. Fig. 28. Cephalothorax and eyes of male from above and behind ; 29. Profile of male (cephalothorax) ; 30. Left palpus of male from outer side ; 31. Ditto, from behind and inner side ; 32. Ditto from outer side rather behind ; 33. Epigyne of female.
- Oxyptila nigrata*, Thor. Fig. 34. Left palpus of male from above and behind.
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N.B.—The short lines indicate the natural length of the spiders.



On New and Rare British Arachnids

NOTED AND OBSERVED IN 1913.

Plate A.

By **Rev. O. PICKARD-CAMBRIDGE, M.A., F.R.S., &c.**

(Read February 3rd, 1914.)



I HAVE very little to record from any personal observations during the past year. The kind help, however, and the work of others enables me to give you, in the subjoined List, some of the valuable and important results of their work. Most of the materials in the List have been kindly submitted to me by those who have collected them. I would specially name among the collectors several of my sons and Dr. Haines, of Winfrith, in Dorset, but more especially Dr. A. Randell Jackson, M.A., D.Sc., of Hoole Road, Chester, whose work in Scotland last July has added several species of *Araneidea* (true spiders) to the British List. These will be found in the "List" in their systematic position.

Nothing new to the British List has been turned up by my Dorset helpers, though, as will be observed, some rare and local species have occurred. This may, of course, be in some, and probably in great, measure owing to those parts of the

county where their work has lain having been already more closely worked than many other British districts.

My best thanks are due to all who have in any way assisted me during the past year, and I must add here the name of Mr. Denis R. Pack Beresford, of Fenagh House, Bagenals Town, Ireland, from whose researches the British and Irish List has been enriched by a valuable addition to the genus *Clubiona*—noted in the List below.

Possibly there may be this year some new Members of our Field Club who may wish to know where further information is to be obtained on the general subject of British Arachnids. If so, I would refer them to the author's following publications :—

“*Spiders of Dorset*,” published by the Dorset Nat. History. and Antiquarian Field Club, 1879—1881, and the Supplementary Papers in most of the subsequent years to the present date.

“*List of British and Irish Spiders*” (Sime and Co., Dorchester, 1900).

“*British Phalangidea or Harvest Men*” (Dorset Field Club Proceedings, Vol. XI., 1890).

“*British Chernetidea or False Scorpions*” (l.c. Vol. XIII., 1892).

The following Papers on British Arachnids have been published since my last report in Vol. XXXIV. :—

“On Some Arthropods observed in 1911 and 1912,” by A. Randell Jackson, Lancashire Naturalist, March, 1913, pp. 440—443.

(This Paper contains notes and records of numerous known species from Dorsetshire as well as other parts of England.)

“A Spider New to the British Isles (*Clubiona juvenis*, Simon), recently found in Ireland,” by A. Randell Jackson, M.D., D.Sc., and Denis R. Pack Beresford, B.A., M.R.S.A., Irish Naturalist, November, 1913, pp. 205, 207. pl. I., figs 1—4.

(This species is noted in the following List.)

"On Some New and Obscure British Spiders," Nottingham Naturalists' Society for 1911—12, pp. 20—46, pl. I., II., by *A. Randell Jackson, M.D., B.Sc.*

(The new species and some others contained in this paper are noted in the subjoined List. A considerable portion of the paper is devoted to the genus *Porrhomma*, Simon, of which the British species are subjected to an exhaustive and careful differentiation.)

"A Contribution to the Spider Fauna of Scotland," by *A. Randell Jackson, M.D., D.Sc.*

Proceedings of the Royal Physical Society of Edinburgh, Session 1913—1914, Vol. XIX., No. 5, pp. 103—128. Plates II., III.

(Various new and rare species, noted and described by Dr. Jackson in this paper, will be found in the subjoined List.)

"On the Origin of the Araneidal Fauna of Yorkshire." Naturalist for Feb. and March, 1913, pp. 111—114 and 131—138. By *Wm. Falconer*.

ARACHNIDA.

ARANEIDEA.

Fam. DYSDERIDÆ.

Segestria Bavarica, C. L. Koch.

Segestria Bavarica, C. L. Koch, Die Arachn. X., p. 93, pl. 351, fig. 818.

Segestria Bavarica, Cambr., Spid. Dors., p. 8

An immature example was found and sent to me by Dr. Haines from Ringstead in April, 1913. Although immature, I have no doubt about the identity of this specimen. The only British record hitherto is that given in Spid. Dors., p. 8; though there the locality was given erroneously. The place of capture was, in fact, under a stone or piece of rock in the island of Portland.

Fam. DRASSIDÆ.

Micariosoma minimum, C. L. Koch.

Micariosoma minimum, C. L. Koch, Cambr. Proc.

Dors. N. H. and A. F. Club XXXIII., p. 70, 1912.

Phrurolithus minimus, C. L. Koch ; A. R.

Jackson, Trans. Nottingham Naturalist Society, 1911—12, p. 23.

Dr. Jackson (l.c.) records another visit, in September, 1912, to Box Hill, the British locality in which this species was first obtained. Immature examples were found in considerable numbers, but only one (a male) adult.

Clubiona juvenis, Simon. Pl. A., figs. 1, 2, 3.

Clubiona juvenis Simon. (Arachnides de France, tom IV., p. 227).

Clubiona juvenis, Sim. ; Dr. A. R. Jackson and Denis R. Pack Beresford. Irish Naturalist, November, 1913, pp. 205—207. Vol. XXII., pl. I., figs. 1—4.

A very distinct species, and new to the British Islands. Adults of both sexes were found in tufts of grass on the Sandhills at Arklow, County of Wicklow, Ireland, by Mr. D. R. P. Beresford. Its position appears to be nearest to *Clubiona trivialis*, L. Koch, but it may easily be distinguished by the form of the palpi in the males and of the epigyne in the females.

Clubiona subsultans, Thor., Pl. A, figs. 4, 5, 6.

Clubiona subsultans, Thor. ; Kulczynski Araneæ Hungariæ, Vol. II., p. 2, pl. IX., figs. 2, 23, 35.

Clubiona subsultans, Thor. ; A. R. Jackson. Proc. Roy. Phys. Soc. Edinburgh, vol. XIX., No. 5, p. 125, pl. III., figs. 3, 4, 5.

An adult of both sexes found by Dr. A. R. Jackson at Loch Rannoch in 1913. A very distinct species, new to the British Fauna. It is allied to *Clubiona reclusa*, Cambr., but is very distinct in the characteristic features of both sexes.

***Agroeca celans*, Blackw.**

Agelena celans, Bl. ; Spid. G. B. and I., p. 161, pl. X., fig. 103.

Both sexes taken rather commonly by my son Alfred (A. E. Ll. P.-C.) in Morden Park in August and September, 1913, among heather.

***Agroeca diversa*, Cambr.**

Agroeca diversa, Cambr. ; Proc. Dors. N. H. and A. F. Club XXXIV., pp. 108, 112, pl. A, figs. 1, 2, 3, 1913.

Several adult specimens of both sexes were found on Bloxworth Heath in September, 1913 (by A. E. Ll. P.-C.). It is possible that future observations may prove this to be a well-marked variety of *A. gracilipes*, Bl. ; but so far I believe it to be a distinct species. The examples now recorded of both sexes are quite similar to those of the type recorded—l.c. supra.

Fam. DICTYNIDÆ.

***Protadia patula*, Sim.**

Lethia patula, Sim. ; Cambr. Spid. Dors., p. 470.

Protadia patula, Sim. ; Ibid Proc. Dors. N. H. and A. F. Club, Vol. XXXIII., pp. 73, 75, pl. A., figs. 1a, 2a, 3a, 4a, 5a, 6, and 7.

Dictyna patula, Sim. ; Arachn. de France I., p. 197.

Protadia patula, Sim. ; Dr. A. Randell Jackson, Trans. Nottingham Naturalists' Society for 1911, pp. 20—23.

Dr. Jackson (l.c. supra) describes the male, the female only having been described previously, and distinguishes the species from *Protadia subnigra*, Cambr.

Fam. HAHNIIDÆ.

Hahnia candida, Sim.

Hahnia candida, Sim. ; Cambr. Spid. Dors., p. 71.

An adult female was found among heather in Morden Park by my son (W. A. P.-Cambridge) in Sept., 1913, and a male and two females (adult) were sent to me from Ringstead, where they were taken by Dr. Haines in the same month. Hitherto the only known British locality has been at Portland.

Fam. THERIDIIDÆ.

Episinus lugubris, Sim.

Episinus lugubris, Sim. ; Arachn. de France, tom. V., p. 42, and Cambr. Proc. Dors. F. Club, Vol. XXVII., pp. 74, 83, pl. A., fig. 2.

Adults of both sexes, as well as immature examples, found by my son (A. E. Ll. P.-C.) in several coppices at Bloxworth in May, 1913.

Theridion simile, C. L. Koch.

Theridion saluum, Cambr. ; Proc. Dors. N. H. and A. F. Club XXXIII., pp. 70, 74, 88, pl. A, figs. 8, 9, 10.

On further consideration of the type specimen of *T. saluum* and comparison with examples of *Theridion simile*, C. L. Koch, I have been led to believe that it may be only a melanic example of the latter. This, however,

I do not as yet consider at all certain, and it remains for further research to confirm it. The normal form of *Theridion simile* probably occurs on heaths in the same district, but I have never as yet taken it so far from its usual habitat, *i.e.*, the heather-clad waste lands.

Phyllonethis instabilis, Cambr. ; Pl. A., figs. 7, 8.

Theridion instabile, Cambr. ; Trans. Linn. Soc. XXVII., p. 416, pl. 55, No. 14.

Phyllonethis instabilis, Cambr. ; Spid. Dors., p. 95.

Theridion venustum, Walck.-Cambr. ; Spid. Dors., p. 476. Dr. A. R. Jackson, Proceedings Roy. Phys. Soc., Edinburgh, Vol. XIX., No. 5, pp. 122, 123, Pl. II., figs. 8, 10, 12, 13.

It appears on further consideration that the above, formerly considered to be of the same species as *Theridion venustum*, Walckenaer, is not that species, nor yet the *Theridion lepidum*, Walck., with which, also, it was considered conspecific ; the original name, therefore, given to it (Cambr., Trans. Linn. Soc., *l.c.* above) becomes again valid.

Phyllonethis bellicosa, Sim. ; Pl. A, figs. 9, 10, 11.

Theridium lepidum, Walck.-Sim. ; Arachn. de France V., p. 64.

Theridium bellicosum, Sim. ; Aran nouv. &c., 2e Mém., p. 106, in Mém. Soc. Roy. Sc. Liège and Arach. de France V., p. 64, as syn. of *T. lepidum*, Walck., note 3.

Theridium bellicosum, Sim. ; Dr. A. R. Jackson, Proceedings Roy. Phys. Soc., Edinburgh, Vol. XIX., No. 5, p. 121, and pp. 123, 124, Pl. II., figs. 7, 9, 11, and 14.

Theridium lepidum, Walck.-Cambr. ; Annals of Scottish Natural History, pp. 220, 223, October, 1905, sub. *Phyllonethis*.

Examples of both sexes of a spider evidently nearly allied to *Phyllonethis instabilis*, Cambr., were found on Ben Nevis by Dr. Jackson in July, 1913. Comparison of the two, however, proves them to be quite distinct, and that the Ben Nevis examples are *Theridion bellicosum*, Sim., given by M. Simon, Arachn. de Fr., l.c. supra, as a synonym of *Theridion lepidum*, Walck. This synonym, however, seems to be doubtful. It is pretty certain that the Ben Nevis examples are Simon's *T. bellicosum*, and that Dr. Jackson's discovery of them is their first record as a British species. I have received examples of the female from Rev. J. E. Hull, taken on the Cheviots, Scotland, in 1912.

Lithyphantes corollatus, Sim.

Lithyphantes corollatus, Sim.-Cambr. ; Proc. Dors. F. Club, Vol. XVI., p. 122, 1895, and in several succeeding vols., XVII., XXI., and XXVI.

This very distinct and pretty species has been found in some abundance on Bloxworth Heath in the past year, 1913, both sexes, adult and immature, late in the month of September, by my sons A. W. P.-C. and A. E. Ll. P.-C.

Teutana grossa, C. L. Koch.

Teutana grossa, C. L. Koch-Cambr. Proc., Dors. F. Club, 1891, Vol. XII., p. 88.

Two females, not yet quite adult, were sent to me from North Devon in October, 1913, by the Rev. A. E. Eaton, by whom they were found in overhauling the contents of a lumber room. Several years ago a female was sent to me, found by Mrs. Haig Thomas at Grange, near Wareham. There seemed at the time a possibility that this example might have been imported from the Continent, as Mrs. Thomas had recently been travelling there ; but subsequent enquiry made it appear much more probable that it was an indigenous specimen, and, if so, it is the only one as yet recorded for Dorsetshire.

Laseola erythropus, Sim.

Laseola erythropus, Sim.; 1881, Arachn. de France, Vol. V., p. 141, Cambr., Proc. Dors. F. Club, Vol. XXIX., p. 170 (1908).

Laseola proxima, Cambr., Proc. Dors. F. Club XVI., p. 102, pl. A., figs. 3a, 3b, 1895.

An adult male received in October, 1913, from Mr. W. Falconer, was found by the Rev. R. A. Taylor in Cornwall; subsequently I have received both sexes from Mr. Taylor. The female is new to me, but the male I believe to be identical with *L. proxima*, Cambr., which M. Simon considered on examination to be the same as his *L. erythropus*.

Laseola coracina, C. L. Koch.

Euryopis coracina, C. L. Koch-Cambr., Spid. Dors., p. 573.

A male, not quite adult, was found by my son (W. A. P.-C.) among heather in Morden Park on Sept. 20th, 1913. It is still a very rare species, and hitherto has only occurred, so far as I am aware, in one other British locality—Suffolk.

Robertus scoticus, Jackson. Pl. A, figs. 14, 15, 16.

Robertus scoticus, A. R. Jackson, Proc. Roy. Phys. Soc., Edinburgh, Vol. XIX., No. 5, p. 120, Pl. II., fig. 15.

An adult female (length 2mm.), allied to but quite distinct from *Robertus neglectus*, Cambr., was taken at Loch Rannoch in July, 1913, by Dr. A. R. Jackson, and is a species new to science.

Leptyphantes Carrii, Jackson. Pl. A, figs. 12, 13.

Leptyphantes carrii, A. R. Jackson; Trans. Nottingham Naturalists' Society for 1911—12, p. 25, pl. I., figs. 1—4.

A very distinct species new to science found by Dr. Jackson in June, 1912, in Sherwood Forest, running on the trunks of oak trees. A minute description is given, l.c. supra, by Dr. Jackson.

Leptyphantes Blackwallii, Kulcz.

Leptyphantes Blackwallii, Kulcz. ; Cambr. Proc. Dors. F. Club, Vol. XVI., p. 112.

An almost black variety of the female of this spider was taken by my son A. E. Ll. P.-C. at Bloxworth in August, 1913.

Leptyphantes cacuminum, Jackson.

Leptyphantes cacuminum, A. R. Jackson. Proc. Roy. Phys. Soc., Edinburgh, vol. XIX., No. 5, p. 118, pl. II., figs. 1—6.

Adults of both sexes were found by Dr. Jackson on Ben Nevis in July, 1913. It appears to be a very distinct species, and not to have been described or recorded before.

Length of the male 1·75 m.m., and of female 1·8 to 1·9 m.m.

Bathyphantes parvulus, Westr.

Linyphia parvula, Westr. ; Cambr. Spid. Dors., p. 210.

An adult male was taken by A. E. Ll. P.-C. at Bloxworth in August, 1913.

Opistoxys subacuta, Cambr. Pl. A., figs. 19, 20.

Opistoxys subacuta, Cambr., Proc. Dors. F. Club, 1891, Vol. XII., p. 91, fig. 3.

Leptyphantes patens, Cambr. l.c. Vol. XXVIII., 1907, pp. 128, 139, pl. A., figs. 20, 25 (male, not the female).

Opistoxys subacuta having been insufficiently figured (l.c. supra), I have added here some figures of the palpal

organs drawn by Dr. A. R. Jackson, which will perhaps serve for its better identification. The identity of *Leptyphantes patens* with *Opisthoxys subacuta* was unsuspected at the time when the former was described, chiefly owing to the palpal organs of *L. patens* having been forced out of their natural position. Dr. Jackson, who has carefully examined and compared both the types, first suggested to me their identity.

Centromerus (Tmeticus) abnormis, Blackw.

Linyphia abnormis, Bl. ; Cambr. Spid. Dors., pp. 207 and 578.

Adult males were found in Bere Wood towards the end of May, 1913, by my son (A. E. Ll. P.-C.)

Centromerus (Tmeticus) expertus, Cambr.

Tmeticus expertus, Cambr., Spid. Dors., p. 203, and Proc. Dors. F. Club IV., p. 152.

This species, though widely distributed, seems to be a local and rare one. An adult of each sex was found at the end of November, 1913, on the outside of a copse at Bloxworth, among herbage, by my son (A. E. Ll. P.-C.)

Leptorhoptrum (Tmeticus) Huthwaitii, Cambr.

Nerience Huthwaitii, Cambr., Proc. Dors. F. Club X., p. 118, 1889.

Tmeticus Huthwaitii, Cambr., Proc. Dors. F. Club XXVI., p. 47, 1905.

Leptorhoptrum Huthwaitii, Cambr., Kulezynski, *Araneæ Hungariæ* II., p. 79, Tab. III., fig. 20.

An adult male of this fine and widely distributed species was sent to me from Yorkshire in August, 1913, by Mr. W. P. Winter. This spider is certainly out of place in the genus *Tmeticus* ; its place is in the new genus formed for it by Kulezynski (l.c. supra).

Porrhomma Thorellii, Herm. Pl. A. figs. 17, 18.

Porrhomma Thorellii, Herm.

„ „ A. R. Jackson Trans. Nottingham Naturalists' Society, 1911—12, p. 36, pl. II., figs. 22 and 27.

Average length, about 2·4mm. This species, differentiated by Dr. Jackson (l.c. supra) from others with which it has been mixed up, is allied nearly to *Porrhomma pygmæum*, Blackw., and has not, until Dr. Jackson's announcement (supra) been before recorded as British. Both sexes are recorded. The example from which my figures were drawn was sent to me in 1902 by Mr. W. Falconer, from Huddersfield, and was then doubtfully named by me, *P. pygmæum*, Bl.

Porrhomma pallidum, Jackson.

Porrhomma pallidum, A. R. Jackson ; Trans. Nottingham Naturalists' Society, 1911—12, p. 38, pl. II., figs. 18, 32.

Length 1·65mm.—1·8mm. This appears to be, so far as at present known, a Northern form only. Dr. Jackson reports it as hailing from Moray, in N. Scotland, and mountains in Cumberland ; also Northumberland, Yorkshire, Cheshire, and Staffordshire, where it seems to be not rare in both sexes ; found amongst moss and dead leaves in woods. I have not myself seen a type of this species.

Porrhomma montanum, Jackson.

Porrhomma montanum, A. R. Jackson ; Trans. Nottingham Naturalists' Society, 1911—12, p. 40, pl. II., figs. 24 and 34.

Length, 1·5—2m. This spider, new to science and to the British List, is also a Northern form, and usually found at high altitudes—Ben Voirlich, Scotland, Cumberland, Isle of Man, Northumberland, Yorkshire,

Cheshire, and Edinburgh. Both sexes are recorded. It seems to be allied closely both to *P. pygmaeum*, Bl., and *P. oblitum* Cambr. I have not seen a type of this species.

Oreoneta fortunata, Cambr.

Tmeticus fortunatus, Cambr., Proc. Dors. F. Club, Vol. XVI., p. 123, pl. A., figs. 6a—d, and Vol. XXVIII., pp. 121 and 142, pl. B., figs. 42, 43, 44 (1907).

An adult male was taken by the Rev. R. J. Pickard-Cambridge at Warmwell in May, 1913. It is still a rare spider, and its systematic position does not appear to be yet settled.

Sintula cornigera, Bl.

Sintula indecora, Cambr., Proc. Dors. F. Club, Vol. XIV., p. 156, fig. 7.
Nerienne cornigera, Blackw., Spid. G. B. and I., p. 273, pl. XIX., fig. 187.

An adult female of this rare spider was found by my son (A. E. Ll. P.-C.) among heather at Bloxworth on April 11th, 1913.

Maso Brittenii, Jackson. Pl. A, figs. 23, 24, 25, 26, 27.

Maso Brittenii, A. R. Jackson. Trans. Nottingham Naturalists Society, 1911—12, p. 27, pl. I., figs. 11, 12, 13, and pl. II., fig. 14.

Length of male, 1.59mm. ; of female, 2.1mm. A very distinct species described and figured by Dr. A. R. Jackson, l.c. supra, and new to science. The female was found by Dr. Jackson in May, 1912, in a swampy place in Delamere Forest, and the male in the spring of 1911 on Wan Fell, near Penrith (Cumberland), by Mr. Britten.

Gongylidium retusum, Westr.

Erigone retusa, Westr. Araneæ Suec., p. 253.

Nerienne retusa, Westr.-Cambr., Spid. Dors. p. 116.

An adult male was found at Bloxworth Rectory by my son (A. E. Ll. P.-C.) Aug. 3rd, 1913, and another by Dr. Haines at Arne. It is still a rare spider in Dorset.

CORYPHÆUS, F. O. P.-Cambr.

The genus *Coryphæus* was established by the late F. O. Pickard-Cambridge for the reception of a spider found near Carlisle. (Ann. and Mag. N. H., ser. 6, Vol. XIII., 1894, p. 87). This spider (*Coryphæus glabriceps*) afterwards turned out to be identical with *Gongylidium distinctum*, Sim. M. Simon subsequently transferred his *G. distinctum* to the genus *Hilaira*. (Hist. des Araignées I., 701). This last is, it seems to me, quite untenable, and thus *Coryphæus* becomes a good genus, with *C. distinctus*, Sim., as its type.

Coryphæus mendicus, L. Koch. Pl. A, fig. 21, 22.

Coryphæus mendicus, L. Koch. Kulczynski, Fragmenta Arachnologica V., 1907, pp. 585—588, pl. XXI., figs. 14, 16, 17, 18, 19.

Coryphæus mendicus, L. Koch, Dr. A. R. Jackson, Proc. Roy. Phys. Soc., Edinburgh. Vol. XIX., No. 5, p. 127, pl. III., figs. 6, 7, 8.

Both sexes adult (not before recorded as British) were taken by Dr. A. R. Jackson on Ben Nevis, Scotland, in July, 1913. The length of the male is 1.8mm.

Tiso æstivus, L. Koch. Pl. A, figs. 28—33.

Tiso æstivus, L. Koch. Kulczynski Araneæ Hungariæ II., p. 127, Tab. V., fig. 7, *a, b, c, d. e.*

Erigone æstiva, L. Koch, Beit. Z. Kennt. Arach. Tirols, ii.

Tiso aestivus, L. Koch, Dr. A. R. Jackson, Proc. Roy. Phys. Soc., Edinburgh, Vol. XIX., No. 5, p. 127, pl. III. figs. 9, 10, 11.

An adult example of each sex was found on Ben Nevis by Dr. Jackson in July, 1913. This species, which is a very distinct one, had not been before recorded in Great Britain. The length of the male is 1.3 mm.

***Erigone longipalpis*, Sund.**

Neriere longipalpis, Sund. Cambr., Spid. Dors., p. 107, and Trans. Linn. Soc., XVIII., p. 447, pl. XXXIV., No. 23 and 24. Also Proc. Dors. Nat. Hist. and A. F. Club VI., p. 48, pl. B., fig. 4.

Adult males and an adult female found at Arne were sent to me by Dr. Haines in June and September, 1913. A local spider, but at times abundant in some coast localities.

***Erigone arctica*, White.**

Erigone arctica, White. Cambr. Proc. Dors. Nat. Hist. and A. F. Club, Vol. XXII., p. 49, pl. B., fig. 5.

A local spider, but often abundant in some coast localities. An adult of each sex was sent to me in September, 1913, from Arne, by Dr. Haines.

***Erigone Tirolensis*, L. Koch.**

Erigone Tirolensis, L. Koch, Beit. Z. Kennt. Arach. Tirols, ii.

„ „ A. R. Jackson, Proc. Roy. Phys. Soc., Edinburgh, Vol. XIX. No. 5, p. 126, pl. III., figs. 12, 13, 14.

Adults of both sexes were met with by Dr. Jackson in July, 1913, on Ben Nevis, Scotland. The species had not been previously recorded as British. The length of the male is 2.2 mm.

Erigone capra, Sim.

Erigone capra, Sim. Arachn. de France, tom V.,
p. 529, figs. 327, 328, 329.

Erigone capra, Sim. ; A. Randell Jackson. Irish
Naturalist, August, 1910, Vol. XIX., pp.
142—145, pl. 3.

Both sexes of this species, which had not been before
noted in the British and Irish List, were received by
Dr. Jackson from Mr. R. D. Pack Beresford, and were
found by Mr. R. Welsh on the banks of the Ulster Canal,
near Monaghan, in October, 1909. (The record of this
species was inadvertently omitted from Proc. Dors. F.
Club, Vol. XXXII., 1911.)

Lophomma herbigrada, Blackw.

Neriere herbigrada, Blackw. Cambr., Spid. Dors.,
pp. 113 and 576.

Neriere exhilarans, Cambr., Ann. Mag. N. H.,
ser. 5, Vol. 4, p. 199, pl. XII. fig. 3.

An adult male was taken at Bloxworth in April, 1913,
by A. E. Ll. P.-C.

Enidia bituberculata, Wid.

Neriere bituberculata, Cambr. Spid. Dors., p. 119.
Blackw. Spid. G. B. and I., p. 268, pl. XVIII.,
fig. 181.

Dicyphus bituberculatus, Wid.-Camb., List of Brit.
and Irish Spiders, p. 41.

Adults of both sexes were found in abundance and sent
to me by Dr. Haines in April, 1913, from Tadnole Heath.
The generic name *Enidia* was substituted by Mr. F. P.
Smith (Journ. Quaker Microscopical Club, Nov., 1904,
p. 115), the name *Dicyphus* (Menge) being pre-occupied
and *Neriere* restricted to other species of Mr. Blackwall's
generic group of that name.

Entelecara flavipes, Black.

Walckenaera flavipes, Bl., Spid. G. B. and Ireland,
p. 298.

Entelecara flavipes, Bl., Cambr. Proc. Dors. F.
Club, Vol. XXIII., p. 24.

An adult male of this little spider was taken by A. E. Ll. P.-C. in June, 1913, in a copse at Bloxworth. It continues to be a rare species.

Acartauchenius scurrilis, Cambr.

Erigone (Walckenaera) *scurrilis*, Cambr. Proc.
Zool. Soc., Lond., 1872, p. 761, pl. LXVI., fig. 18,
(male).

Aræoncus æquus, Cambr., Proc. Dors. F. Club,
1910, Vol. XXXI., pp. 55 and 69, pl. A., figs.
11—13 (female).

Dr. Jackson has kindly sent me a female of *A. scurrilis*, Cambr., from Germany, and on comparison I find this to be identical with *A. æquus*, Cambr. The male only of the former, and only the female of the latter, were previously known to me.

Thyreosthenius biovatus, Cambr.

Thyreosthenius biovatus, Cambr. Proc. Dors. N.H.
and A. F. Club, XXVIII., p. 121, 1907.

An adult female was received from Mr. J. H. Keys, by whom it was found in a nest of *Formica rufa* (var. *fusca rufa*), at Whitesands, Plymouth,

Panamomops bicuspis, Cambr.

Neriene bicuspis, Cambr., Spid. Dors., p. 139.

Panamomops bicuspis, Cambr., Simon Arachn. de
France V., p. 795.

An adult male of this curious little spider has again been met with by my son (the Rev. R. J. P.-C.) at Warmwell in May, 1913.

Baryphyma pratensis, Bl.

Walckenaera pratensis, Blackw., Spid. G. B. and I., p. 306.

Baryphyma Schlickii, Sim., Arachn. de France, tom V., p. 695.

Walckenaera Meadii, Cambr., Proc. Dors. F. Club, Vol. X., p. 13, and XII., p. 95.

An adult male, received from Dr. Haines, by whom it was found at Tadnole in April, 1913.

Fam. MIMETIDÆ.**Ero Cambridgii**, Kulcz.

Ero Cambridgii, Kulcz. Cambr., Proc. Dors. F. Club, XXXIII., p. 80, pl. A., figs. 30—33.

A fine specimen of the adult female was found close to the Rectory, Bloxworth, on the 17th of May, 1913, by A. E. Ll. P.-C.

Fam. EPEIRIDÆ.**Epeira dromedaria**, Walck.

Epeira dromedaria, Walck. Simon, Arachn. de France, I., p. 62, 1871.

Epeira dromedaria, Walck. Cambr., Proc. Dors. F. Club, Vol. XXX., p. 111, pl. A., figs. 15—17 (1909).

Araneus dromedarius, Walck. Jackson, Trans. Nat. Hist. Society, Northumberland, Durham, and Newcastle-upon-Tyne, n.s. Vol. III., Part 2, p. 9, pl. X., figs. 8, 8a, and Trans. Nottingham Naturalist Society for 1911—12, p. 30.

Dr. Jackson records the results of two visits to the only as yet known British locality of this fine and distinct Epeirid, Burnham Beeches in Buckinghamshire. An adult male was found; this sex had not been before recorded as British.

Zilla Stroemii, Thor.

- Zilla Stroemii*, Thor. Kulecz., *Araneæ Hungariæ*
Z., 137, Tab. V., fig.
30, *a, b*,
 „ „ Bosenberg, *Die Spinnen*,
Deutschland, Tab. III.,
figs. 34, A, B, C.
 „ „ A. R. Jackson, *Proc. Roy.*
Phys. Soc., Edinburgh,
Vol. XIX., No. 5,
p. 125, pl. III., figs,
1, 2.
 „ „ T. Thorell, *Remarks on*
synonyms of European
Spiders, pp. 34, 35, 36.

Adults of both sexes of this spider, new to Britain, were found by Dr. A. R. Jackson on the banks of Loch Rannoch, Scotland, in July, 1913. It is allied to *Zilla X-notata*, Clerck., an abundant and widely-dispersed species, but quite distinct.

Fam. THOMISIDÆ.**Xysticus erraticus**, Blackw.

- Xysticus erraticus*, Bl. *Cambr.*, *Spid. Dors.*, p. 309.
Thomisus erraticus, Blackw. *Spid. G.B. and I.*,
p. 71.

An adult female from West Lulworth found by Dr. Haines in April, 1913.

Xysticus ulmi, Hahn.

- Thomisus Westwoodii*, *Cambr. Trans. Linn. Soc.*,
XXVII., p. 403.

A female of this species found in Morden Park by W. A. P.-C. in September, 1913.

Xysticus luetuosus, Blackw.

Xysticus luetuosus, Bl. Cambr., Spid. Dors.,
p. 305.

Adult males in very fine condition, among dead leaves, &c., in Bere Wood, found by A. E. Ll. P.-C., at the end of May, 1913. An adult female was also found by Dr. Jackson at Loch Rannoch in July, 1913.

Oxyptila trux, Bl.

Oxyptila trux, Bl. Cambr., Spid. Dors., p. 320.

Thomisus trux, Blackw., Spid. G. B. and I., p. 84.

A male and female, adult, found in a copse at Bloxworth in June, 1913, by A. E. Ll. P.-C.

Oxyptila Blackwallii, Sim.

Oxyptila Blackwallii, Sim. Cambr. Spid., Dors.,
p. 318.

Thomisus claveatus, Walck. Blackw., Spid. G. B.
and I., p. 87.

A male, not quite adult, of this species found and sent to me from West Lulworth in April, 1913, by Dr. Haines, and also adult females from Ringstead in September following

Oxyptila sanctuaria, Cambr.

Oxyptila sanctuaria, Cambr., Spid. Dors., p. 319.

An adult female found and sent to me from Arne in June, 1913, by Dr. Haines.

Oxyptila nigrita, Thor. Pl. A, fig. 34.

Xysticus nigrinus, Thor. Tijds. Ent., XVIII.,
1875, pl. 24.

Oxyptila nigrita, Thor. Simon, Arachn. de France,
II., p. 238.

Oxyptila nigrita, Thor. Cambr., Proc. Dors. F.
Club, XXIX., p. 181, pl. A., figs. 35, 36 (1908).

An adult male of this distinct and rare spider was found and sent to me in April, 1913, by Dr. Haines from Ringstead. The male may easily be distinguished from that sex of others nearly allied, and bearing a very similar general appearance, by the form of the cubital joint of the palpus. The female only had been recorded before as British.

ORDER PHALANGIDEA.

Fam. PHALANGIIDÆ.

Sclerosoma quadridentatum, Cuvier.

Sclerosoma quadridentatum, Cuvier, Cambr., *British Phalangidea*, Proc. Dorset F. Club, Vol. XI., p. 171, pl. B., fig. 4.

An immature example of this species was sent to me from West Lulworth by Dr. Haines, shewing, it appears to me, very clearly the distinctness of the species from its ally, *S. Romanum*, L. Koch.

Fam. TROGULINAE.

Anelasmacephalus Cambridgii, Westwood.

Trogulus Cambridgii, Westwood (1874), Thes. Ent. Oxon., p. 202, pl. 37, fig. 6.

Anelasmacephalus Cambridgii, Westw. Cambr., Dors. F. Club, Vol. XI., p. 207, pl. E., fig. 29.

An example of this rare and curious Arachnid was found and sent to me from Ringstead in April, 1913, by Dr. Haines.

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ORDER PHALANGIDEA.

Fam. *Phalangiidae*. Sub-Fam. *Sclerosomatinae*.

Sclerosoma quadridentatum.

Cuvier

p. 139

Fam. *Trogulinæ*.

Anelasmacephalus Cambridgii,

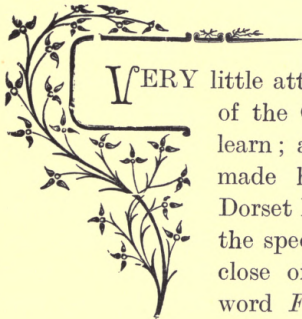
Westwood. p. 139





A Tentative Account of the Fungi of East Dorset.

By the Rev. E. F. LINTON, M.A., F.L.S.



VERY little attention has been paid to the Fungi of the County of Dorset, as far as I can learn ; and no attempt seems to have been made hitherto by the Members of the Dorset Field Club to enumerate or record the species. In the general index at the close of Vol. 16 of the *Proceedings* the word *Fungi* does not occur ; and in the eighteen annual volumes that have since been issued I find no evidence that the subject has been dealt with. Considering the great variety that occur in our woods and pastures, and the beauty of form or colour of numbers of the species, this omission is curious ; and I hope that my initial attempt to fill a gap may lead to further investigation of this branch of British botany.

The neighbouring County of Hampshire contains one of the best worked and also richest districts for Fungi in the British Isles ; and is fortunate in having for its exponent

such an accomplished adept as Mr. J. F. Rayner, F.R.H.S., whose elaborate "Guide to the Fungi, &c., of the New Forest" has been published in the Proceedings of the Bournemouth Natural Science Society, Vol. III.

My interest in this class of plants was first aroused by my brother, the Rev. W. R. Linton, late Vicar of Shirley, Derbyshire, in his later visits, 1905—1907, whose name is appended in this paper to the localities of the species he introduced me to. Since 1907 I have collected during the autumn season in Edmondsham and the immediate vicinity, and kept note of results, forwarding all specimens while fresh to Mr. J. F. Rayner, to be named or confirmed. The value and accuracy of the records in this paper are due in great measure to his much-enduring courtesy in responding to my frequent appeals and naming the contents of my packets.

This last season, the autumn of 1913, I have gone further afield, and visited several sylvan localities along the eastern border of the county, from Alderholt and Cranborne to Branksome Park near Bournemouth; and have also had most helpful co-operation from two ladies, who have collected and sent specimens to Mr. Rayner to be named by him and reported to me for use in this paper. Mrs. Pringle has gathered material at Ferndown, and introduced me to some of the woods in that neighbourhood. Mrs. E. W. Baker, of Witchampton Rectory, has collected, and submitted to Mr. Rayner, all the numerous species recorded below from Colehill near Wimborne, Crichel, Holt Wood, Lower Mannington, and Witchampton, which I acknowledge here, and also some few from Branksome Park, to which her name is appended as collector in the proper place.

Of the minor localities mentioned below Castle Hill Wood, Furze Common Copse, Great Down Copse, Rhymes, Hyles', Romford, and Goatham, are all situate in Edmondsham; Birches Copse and Sutton Holms are in a detached portion of Gussage St. Michael adjoining Edmondsham; Mount Pleasant is between Verwood and Woodlands; and Branksome Park is the open part of that estate which is not yet

enclosed or built over. Other places named will be easily recognised.

With regard to the plan of my paper, I have had Mr. Rayner's *Guide* by me for comparison, as a work arranged on modern lines, followed the same order of Classes, Families and Orders, and with his consent made free use of his etymological explanations and descriptive notes, and quoted such English names as he sanctions. As to the order of species in each genus, I have followed George Masee in his *British Fungus Flora* (1893-95), as all my notes are entered in my copy of his book.

A Synopsis of the arrangement of British Fungi in their Classes, &c., has been drawn up in accordance with that in modern use, and follows herewith.

FUNGI.

Class I. BASIDIOMYCETES.

Order I. *HYMENOMYCETEA E*.

Family 1. AGARICINEAE Fr.

Section 1. Leucosporæ Fr.

Series A. *Molles* Sacc.Series B. *Tenaces* Sacc.

Section 2. Rhodosporæ.

,, 3. Ochrosporæ.

,, 4. Melanosporæ Sacc.

Family 2. POLYPOREAE Fr.

,, 3. HYDNEAE Fr.

,, 4. THELEPHOREAE Pers.

,, 5. CLAVARIEAE Corda.

,, 6. TREMELLINEAE Fr.

Order II. *PILACREAE*.Order III. *GASTEROMYCETES*.

Family 1. PHALLOIDEAE Fr.

,, 2. NIDULARIACEAE Fr.

,, 3. LYCOPERDACEAE Ehrb.

,, 4. SCLERODERMEAE Fr.

,, 5. HYMENOGASTRACEAE Vitt.

Class II. ASCOMYCETES.

Order I. *PYRENOMYCETES*.Order II. *DISCOMYCETES*.

Class III. PHYCOMYCETES (Moulds).

Class IV. DEUTEROMYCETES (Imperfect Fungi).

MYCETOZOA.

FUNGI.

Class I. BASIDIOMYCETES.

Spores borne on supports termed basidia.

Order I. *HYMENOMYCETES*.

Spores exposed before maturity.

Family 1. AGARICINEAE Fr.

Section 1. Leucosporæ.

Spores more or less white.

Series A. *Molles*. Fleshy, putrefying.

Genus 1. **AMANITA** Fr. (*from some fungi found on Mt. Amanus*). Gills free ; volva and ring present.

A. phalloides Fr. (Like *Phallus*, from the smell.)

In woods ; not uncommon ; poisonous. Great Down Copse and copse by Hyles' ; Sutton Holms ; near Cranborne (1) ; wood S. of Daggon's Road Station.

A. mappa Fr. (Lat., napkin).

Frequent in woods ; poisonous ; smell strong. Castle Hill Wood ; Furze Common Copse ; Sutton Holms.

A. pantherina Fr. (Lat., spotted like a panther).

In woods ; scarce ; poisonous. Castle Hill Wood.

A. muscaria Fr. (Lat., *musca*, a fly ; flypapers were formerly made from it).

Under birches ; not uncommon ; very poisonous ; very distinct with its scarlet white-spotted pileus. Ferndown (*Mrs. Pringle*). Colehill. Sutton Holms.

A. strobiliformis Vitt. (Lat., cone-like, from the conical base of stem).

Wood borders; rare. Sutton Holms (*W. R. Linton*).

A. rubescens Fr. (Lat., turning red).

Woods, etc., fairly common; edible, reddish.
Furze Common Copse. Mt. Pleasant. Broadstone.

A. spissa Fr. (Lat., crowded, *i.e.* the warts on the pileus).

Open ground near trees; local; probably poisonous. Like *A. rubescens*, but grey above.
Castle Hill Wood. Furze Common Copse. Wood S. of Alderholt Station.

Genus 2. **AMANITOPSIS** Roze. (Gr., like an *Amanita*).
Gills free, with a volva but no ring.

A. vaginata Roze. (Lat., with a sheath).

Woods; not common. Furze Common Copse.
Sutton Holms.

Genus 3. **LEPIOTA** Fr. (Gr., *lepis*, a scale, *ous*, the ear).
Gills free, with a ring but no volva.

L. procera Scop. (Lat., tall). "Parasol Mushroom."

Woods and pastures; frequent; edible.
Edmondsham Park. Furze Common Copse.

L. rachodes (Vitt.) Fr. (Gr., surf-like, from the scaly pileus).

Under trees; not common. Furze Common Copse.

L. amianthina Scop. (Lat., from its yellowish tinge).

Woods or pastures; said to be edible. Furze Common Copse. Near Mount Pleasant.

Genus 4. **ARMILLARIA** Fr. (Lat., *armilla*, a bracelet).
Gills adnate to stem; ring present, at least at first.

A. mellea Vahl. (Lat., of the colour of honey).

In woods, chiefly on decayed wood, often clustered; edible; common. Castle Hill Wood.

Great Down Copse. Sutton Holms. Witchampton.

A. mucida Schrad. (Lat., slimy). "Beech Disease."

On beech trunks, pure white; said to be common. Avenue, St. Giles' Park. Beckington Beeches, St. Giles to Gussage.

Genus 5. **TRICHOLOMA** (Gr. *trichos*, of a hair, *loma*, a fringe, from the traces of a veil left on the margin of the pileus). Gills sinuate; volva 0, ring 0.

T. equestre Linn. (Lat., knightly, from its distinguished appearance).

In fir woods, rare. Plantation S. of Daggon's Road Station. Broadstone.

T. portentosum Fr. (Lat., monstrous).

Edible. Castle Hill Wood. Copse by Hyles', Edmondsham. Great Down Copse.

T. acerbum Bull. (Lat., bitter).

Not common. Castle Hill Wood.

T. albo-brunneum Pers. (Lat., white and brown).

Pine woods, etc. Castle Hill Wood. Great Down Copse.

T. rutilans Schaeff. (Lat., ruddy).

On or near pine roots and stumps. Cranborne. Plantation S. of Daggon's Road Station. Furze Common Copse. Near Mt. Pleasant. Lower Mannington.

T. imbricatum Fr. (Lat., tiled).

In pine woods, etc.; edible. Cranborne. Creech Hill Wood, St. Giles. Alderholt.

T. murinaceum Bull. (Lat., of the mouse-coloured pileus).

Rare. Great Down Copse.

T. terreum Schaeff. (Lat., earthy, in colour).

Chiefly pine woods; not uncommon. Castle Hill Wood. Colehill, Wimborne. Plantation S.

of Daggons Road Station. Belt of woodland E. side of St. Giles' Park.

T. saponaceum Fr. (Lat., soapy, as to odour).

Woods ; rather common. Castle Hill Wood. Sutton Holms.

T. virgatum Fr. (Lat., striped).

Pine woods ; infrequent. Plantation S. of Daggon Road Station.

T. sulphureum Fr. (Lat., sulphur-coloured).

In woods ; poisonous. Goatham. Great Down Copse. Witchampton.

T. lascivum Fr. (Lat., playful, sporting from type).

In mixed woods ; rare. Furze Common Copse.

T. album Schaeff. (Lat., white).

In woods ; rare. Great Down Copse.

T. personatum Fr. (Lat., wearing a mask). "Blewits."

Not common. Furze Common Copse, W. R. Linton. A pale form, var. **sacrum**, open Down a little S. of Beckington Beeches.

T. nudum Bull. (Lat., naked, from the glabrous margin).

Common in woods. Castle Hill Wood. Creech Hill Wood, St. Giles. Withy Beds, Crichel. Furze Common Copse. Belt E. side of St. Giles' Park. Witchampton.

T. grammopodium Bull. (Gr., with lines on the stem).

Rare ; edible. Branksome Park. Great Down Copse.

Genus 6. **CLITOCYBE** Fr. (Gr. *clitos*, a steep slope, *kube*, head, from the decurrent gills of the genus). Stem externally fibrous.

C. nebularis Batsch. Lat., *nebula*, a cloud, the pileus being cloud-grey).

Esculent and of good flavour ; frequent. Cranborne. Furze Common Copse. Witchampton.

C. clavipes Pers. (Lat., club-footed, the stem being swollen at the base).

Pine woods. Only seen in Furze Common Copse.

- C. odora** Bull. (Lat., fragrant, from the spicy odour when dry).

Rare ; edible ; scented like violets, when fresh (J. C. Rayner). Woods at the S. entrance to Alderholt Park.

- C. rivulosa** Pers. (Lat., rilled, from the furrowed pileus). Pastures, etc. ; very uncommon. Pasture-field, Edmondsham.

- C. cerussata** Fr. (Lat., painted with white lead).

In woods, not common ; edible. Plantation near Cranborne.

- C. phyllophila** Pers. (Gr., leaf-loving, from the habitat).

Among leaves in woods. Uncommon ; said to be poisonous. Great Down Copse.

- C. pithyphila** Fr. (Gr., pine-loving).

In pine woods ; rare. Furze Common Copse.

- C. candicans** Pers. (Lat., shining white, the colour of the pileus).

Among damp leaves in woods. Furze Common Copse.

- C. maxima** Gaertn. and Mey. (Lat., greatest).

In woods (in this district) and pastures. Great Down Copse, and Copse by Hyles', near Edmondsham. Sutton Holms.

- C. infundibuliformis** Schaeff. (Lat., funnel-shaped).

Among moss in woods and fields ; edible and excellent. Plantation near Cranborne.

- C. geotropa** Bull. (Gr., turned towards earth, from the margin).

Woods and near their borders ; edible ; uncommon. Near Rhymes Copse and near Castle Hill Wood, Edmondsham. Maldry Wood, St. Giles.

- C. inversa** Scop. (Lat., inverted, from the margin of pileus).

Among dead leaves, often gregarious ; not common. Furze Common Copse, and near Castle Hill.

C. flaccida (Sow.) Fr. (Lat., flabby).

Among dead leaves in woods ; not common. Furze Common Copse.

C. cyathiformis Bull. (Lat., like a drinking-cup).

In woods, pastures, etc. ; rare. Maldry Wood, St. Giles.

C. brumalis Fr. (Lat., wintry, from its late appearance.)

Pine woods ; not common. Copse near Mount Pleasant. Branksome Park.

C. metachroa Fr. (Gr., changing colour).

Pine woods, etc. ; not uncommon. Broadstone. Plantation near Cranborne. Furze Common Copse.

C. ditopoda Fr. (Gr. double-footed ; the stem is sometimes central and sometimes eccentric).

In woods under pines. Furze Common Copse. Sutton Holms.

C. fragrans (Sow.) Fr. (Lat., sweet-scented).

Among moss in woods ; edible. Ferndown. Lower Mannington. Maldry Wood, St. Giles. Sutton Holms.

Genus 7. **LACCARIA** Berk. (From shellac, characterising some of the species.)

L. laccata Berk. (Lat., lacquered).

Woods, heaths, etc. ; common ; variously coloured, usually purplish. Plantation S. of Daggen's Road Station. Ditto near Cranborne. Several woods in Edmondsham. Ferndown, *Mrs. Pringle*. Sutton Holms. Var. **amethystina** Vaill. Ferndown. Martin Wood. Sutton Holms. Witchampton.

Genus 8. **COLLYBIA** (Gr. *collubos*, a small coin, in reference to the flattish pileus).

C. radicata Rehl. (Lat., having a root).

In woods ; edible. Castle Hill Wood. Belt of wood E. side of St. Giles' Park.

C. maculata A. and S. (Lat., spotted).

Pine woods. Plantation S. of Daggon's Road Station. Ferndown, *Mrs. Pringle*. Copse near Mt. Pleasant.

C. butyracea Bull. (Lat., buttery, from the sticky pileus).

Rather common in woods. Castle Hill Wood. Plantation near Cranborne. Furze Common Copse.

C. velutipes (Curt.) Fr. (Lat., velvet-footed, from the velvety stem).

Gregarious ; on trunks and stumps. Elm stump, Edmondsham. Ferndown. Belt on E. side of St. Giles' Park.

C. confluens Pers. (Lat., from the closely gregarious habit).

Among leaves in woods ; rare (absent from Rayner's New Forest list). Creech Hill, St. Giles. Furze Common Copse.

C. conigena Pers. (Lat., evolved from fir-cones).

Growing on dead half-buried cones of Scotch fir in woods ; not uncommon. Branksome Park. Broadstone. Furze Common Copse. Lower Mannington Plantation.

C. cirrhata (Schum.) Fr. (Lat., curled, from the slender twisted stem).

Among moss ; rare. Castle Hill Wood, and in a copse near it.

C. tenacella (Pers.) Fr. (Lat., somewhat persistent).

Chiefly pine woods ; not common. Ferndown, *Mrs. Pringle*. Witchampton.

C. dryophila (Bull) Fr. (Gr., oak-loving).

In oak woods, among dead leaves ; said to be common. Castle Hill Wood. Plantation near Cranborne. Ferndown.

- C. extuberans** Fr. (Lat., from the prominent umbo of the pileus).

On rotten wood, etc. ; rare (not noted in New Forest list). Furze Common Copse.

Genus 9. **MYCENA** (Gr., *myces*, a fungus). Pileus thin, campanulate, usually striate ; stem slender ; species usually small, mostly growing on wood.

- M. capillaris** (Schum.) Fr. (Lat., from the slender hair-like stem).

On dead beech and other leaves ; rare. Creech Hill Wood, St. Giles.

- M. corticola** (Schum.) Fr. (Lat., *cortex*, bark, *colo*, inhabit).

Among moss on bark of living trees ; not common. Edmondsham Rectory garden and orchard. Sutton Holms.

- M. discopoda** Lév. (Gr., with a disc-like foot of the stem).

On sticks, &c. ; rare. Castle Hill Wood.

- M. rorida** Fr. (Lat., *ros*, dew, from the running glutinous stem).

On dead bramble twigs in woods ; rare. Wood in Goatham.

- M. clavicularis** Fr. (Lat., tendril-like, of the stem ?).

On the ground in woods ; uncommon. Broadstone.

- M. epipterygia** (Scop.) Fr. (Gr., upon bracken).

On twigs and among moss in woods ; not very common. Furze Common Copse. Maldry Wood, St. Giles.

- M. leucogala** Cooke. (Gr., white milk, from the exudation when broken).

On rotten stumps in woods ; not common. Ferndown. Furze Common Copse.

- M. galopoda** (Pers.) Fr. (Gr., with milky stem, like the last).

Among moss, on trunks ; not very common.
Great Down Copse. Furze Common Copse.

- M. sanguinolenta** (A. and S.) Fr. (Lat., full of blood, from the juice).

Among damp leaves and moss, in woods ; not uncommon. Branksome Park. Furze Common Copse. St. Giles, E. side of Park. Sutton Holms.

- M. Iris** Berk. (Gr., the rainbow, from the colouring).

On fir stumps ; rare. Furze Common Copse.

- M. filopes** (Bull) Fr. (Lat., from the thread-like stem).

On dead leaves in woods ; common. Castle Hill Wood. Goatham. Great Down Copse. Belt E. side of St. Giles' Park.

- M. pullata** Berk. and Cke. (Lat., clothed in mourning, from the dark brown colour).

On dead leaves ; rare. Broadstone.

- M. ammoniaca** Fr. (Lat., with the odour of *ammonia*).

On the ground, chiefly under pines ; uncommon. Castle Hill Wood.

- M. metata** Fr. (Lat., measured or marked off).

Among moss in pine woods ; not common. Furze Common Copse, W. R. Linton. Lower Mannington Plantation.

- M. consimilis** Cooke. (Lat., resembling, *i.e.*, other species).

Among grass ; very rare (not in New Forest list). Castle Hill Wood.

- M. stannea** Fr. (Lat., of tin, from the colour ; "tin-colour with a silky sheen even when dry," *G. Massee*.)

Among grass in woods. Wood, Goatham. Furze Common Copse.

- M. rugosa** Fr. (Lat., wrinkled, from the pileus).

On or near stumps, trunks, etc. ; common ; Ferndown, *Mrs. Pringle*. Great Down Copse. Maldry Wood, St. Giles. Witchampton.

M. galericulata (Scop.) Fr. (Lat., having a small cap).

On stumps and the ground in woods ; common.
Castle Hill Wood. Plantation near Cranborne.
Furze Common Copse. Great Down Copse.
Goatham Plantation. Belt E. side of St. Giles'
Park. Sutton Holms.

M. polygramma (Bull.) Fr. (Gr., with many lines, of the stem).

On trunks and stumps ; rare. Copse adjoining
Hyles', Birches Copse. These two localities adjoin.

M. tintinnabulum Fr. (Lat., a bell, from the campanulate pileus).

On fallen trunks ; rare. Plantation, Goatham.

M. lactea (Pers.) Fr. (Lat., milky, from the white colour).

On dead pine-needles ; uncommon. Castle
Hill Wood. Ferndown, *Mrs. Pringle*.

M. luteoalba Bolton. (Lat., yellowish-white).

Among moss in pine woods ; not common ;
stem paler yellow than in **M. flavoalba**. Only seen
in Furze Common Copse.

M. pura (Pers.) Fr. (Lat., pure, unmixed, from the colour, usually rose, but variable).

Woods ; with the odour and taste of radishes ;
frequent. Plantation near Cranborne. Belt E.
side of St. Giles' Park. Great Down Copse.
Witchampton.

Genus 10. **OMPHALIA** Fr. (Gr., *omphalos*, the navel, from the usual shape of the pileus). Stem cartilaginous ; pileus usually depressed in the centre ; gills decurrent.

O. umbellifera (Linn.) Fr. (Lat., umbrella-shaped).

In wet places, swamps ; not common. Sutton
Holms ? *W. R. Linton*.

O. umbratilis Fr. (Lat., abiding in shade).

Sides of ditches and damp hollows ; rare
(absent from the New Forest list). Broadstone.

O. fibula (Bull.) Fr. (Lat., a pin).

In damp, mossy, or grassy woodland spots ; usually orange ; not common. Castle Hill Wood. Birches Copse.

Genus 11. **PLEUROTUS** Fr. (Gr., *pleura*, a side, *ous*, an ear, from the shape of the pileus, and the lateral or eccentric position of the stem).

P. ulmarius Bull. (Lat., adjective of elm, *ulmus*).

On trunks of trees ; rare (not in the New Forest list). Withy Beds, Crichel.

P. ostreatus (Jacq.) Fr. "Tree oyster."

On trunks ; gills decurrent, stem lateral ; not common. On beech, St. Giles' Park.

P. porrigens Pers. (?) (Lat., stretching out).

Sessile on old pine trunks ; rare. Withy Beds, Crichel (Mrs. Baker's specimen was rather old for naming).

Genus 12. **HYGROPHORUS** Fr. (Gr., bearing moisture, from the moist or viscid pileus of most of the species). Gills waxy ; plant often brightly coloured.

H. ceraceus (Wulf.) Fr. (Lat., waxy). Of a wax-yellow colour.

Pastures ; infrequent. Near Plantation S. of Daggon's Road Station.

H. coccineus (Schaeff.) Fr. (Lat., scarlet).

Among moss and grass ; bright red ; edible ; common. Castle Hill, near Cranborne. Edmondsham. Near Romford. By Martin Wood, *Miss V. Linton*. Witchampton.

H. miniatus Fr. (Lat., red).

Among grass, in pastures or woods ; edible. Smaller than the other crimson or red species, **H. coccineus** and **H. puniceus**. Castle Hill Wood. Furze Common Copse. Field between Edmondsham and Verwood Station.

H. puniceus Fr. (Lat., purplish-red).

Mossy pastures and woods ; common ; larger than **H. coccineus**, which it most resembles, and stem striate with a white base. Goatham. Great Down Copse. Near Romford. Witchampton.

H. obrusseus Fr. (Lat., of gold-assaying, from the golden-sulphur colour).

Grassy places in woods ; rather rare. Plantation S. of Daggon's Road Station. Withy Beds, Crichel.

H. conicus Fr. (Lat., conical).

In pastures ; frequent. Field near Castle Hill Wood. Field by Birches Copse. Near Romford.

H. chlorophanus Fr. (Fr., greenish-yellow).

Grassy places in or near woods ; edible ; clear yellow ; not common. Furze Common Copse. Withy Beds, Crichel.

H. psittacinus (Schaeff.) Fr. (Lat., parrot-coloured ; red and green).

In pastures ; edible ; common. Fields of Edmondsham Park, and towards Romford. Witchampton.

H. pratensis Fr. (Lat., of meadows).

Pastures and woods ; said to be common. In or near Goatham Plantation.

H. virgineus (Wulf.) Cke. (Lat., virginal, from its white colour).

Pastures and open woods ; edible ; common. Edmondsham, Hyles, abundant. Sutton Holms. Half-a-mile S. of Wimborne. Var. **roseipes** Mass., with stem soon hollow and rosy towards the base ; spores elongate. Near Romford.

H. cossus Fr. (Lat., larva of goat-moth, from its smell).

Among grass in woods ; rare. Creech Hill Wood, St. Giles.

H. hypothejus Fr. (Gr., sulphur beneath, because yellow under the olive gluten).

In pine woods, among heather ; rather common.
Broadstone. Colehill. Plantation S. of Daggon's
Road Station. Copse near Mt. Pleasant.

Genus 13. **LACTARIUS** Fr. (Latin, *lac*, milk, from the milky juice). Gills usually decurrent ; plant often large, fleshy.

L. torminosus (Schaeff.) Fr. (Lat., causing colic).

In woods ; rather common ; strawberry colour, margin involute. Castle Hill Wood. Sutton Holms.

L. turpis Fr. (Lat., base, ugly ; from the dingy colour).

In woods, chiefly under birches ; not frequent. Ferndown, *Mrs. Pringle*. Copse between Hyles' and Birches Copse.

L. insulsus Fr. (Lat., tasteless).

In woods and pastures ; like **L. deliciosus**, but of paler colour ; rare. Sutton Holms.

L. blennius Fr. (Gr., slimy).

On the ground in woods ; frequent. Castle Hill Wood. Plantation near Cranborne. Belt on E. side of St. Giles' Park.

L. pyrogalus (Bull.) Fr. (Gr., fiery milk, from its acrid taste).

In woods ; livid grey, poisonous ; not frequent. Plantation, Goatham.

L. chrysorrheus Fr. (Gr., gold-flowing, from the deep yellow milky juice).

In woods, chiefly under oaks ; milk very acrid, white then golden-yellow ; rather common elsewhere. Plantation S. of Daggon's Road Station. Sutton Holms.

L. vellereus Fr. (Lat., fleecy, from the downy pileus).

In woods ; said to be common in the New Forest. Seen only on the Romford side of Birches Copse.

L. deliciosus Fr. (Lat., delicious).

In woods under pines ; edible ; scarce in the district ; common in the New Forest. Woodland, Branksome Park.

L. pallidus Fr. (Lat., pale in colour).

In woods chiefly under beeches ; pale tan ; infrequent. Castle Hill Wood. Martin Wood, *Miss V. Linton*.

L. quietus Fr. (Lat., restful, mild ; from the agreeable flavour).

In woods and open ground under trees ; common. Alderholt Wood, near the Station. Castle Hill Wood. Furze Common Copse. Great Down Copse. Birches Copse. Lower Mannington Plantation.

L. rufus Scop. (Lat., red).

In dry pine woods ; reddish-bay, margin clothed with whitish down when young ; acrid, poisonous ; frequent. Plantation S. of Daggon's Road Station. Colehill, Wimborne. Ferndown. Furze Common Copse.

L. fuliginosus Fr. (Lat., sooty, from the dark down with which the pileus is at first sprinkled).

In woods ; poisonous. Castle Hill Wood.

L. volemus Fr. (Lat., a kind of pear, from the stem being enlarged upwards ?).

In woods, pileus golden-tawny of large size ; rare. Edmondsham.

L. serifluus Fr. (Lat., flowing with *serum*, from its watery milk).

Damp places in woods and open ground ; very common. Branksome Park. Broadstone. Several woods in Edmondsham. Ferndown, *Mrs. Pringle*. Goatham. Lower Mannington. Sutton Holms.

L. mitissimus Fr. (Lat., very mild).

In woods ; frequent ; nearly allied to the next, but distinguished by the shining golden-tawny

colour of the pileus and stem. Castle Hill Wood.
Sutton Holms. Witchampton.

L. subduleis Fr. (Lat., rather sweet).

In woods and open ground ; pileus reddish-brown or bay ; said to be frequent. Romford, in pasture. Sutton Holms, in woodland.

Genus 14. **RUSSULA** Fr. (Latin, *russus*, red, the colour of many species). Gills brittle, usually adnate ; plants mostly large, fleshy, showy. Mild, or acrid, in flavour.

Series A. *Molles*. Taste mild (at least at first).

R. alutacea Fr. (Lat., like tanned leather).

In woods ; edible ; rare. Furze Common Copse.

R. puellaris Fr. (Lat., girlish, from its slender form).

In woods ; not common. Castle Hill Wood.

R. lactea Fr. (Lat., milky, from the colour).

In woods ; distinguished by its white or creamy colour ; uncommon. Plantation S. of Daggon's Road Station.

R. nigricans Fr. (Lat., becoming black).

Turns quite black, differing from the next by the flesh becoming reddish when broken ; common in woods. Border of Birches Copse. Plantation S. of Daggon's Road Station. Furze Common Copse. Great Down Copse. Sutton Holms.

R. adusta Fr. (Lat., scorched, from its turning sooty-grey).

In woods ; flesh not changing colour ; uncommon. Plantation S. of Daggon's Road Station. Great Down Copse.

R. densifolia Secr. (Lat., from the gills being close set).

Flesh turning red ; not common. Castle Hill Wood.

R. heterophylla Fr. (Gr., gills different,—in length).

In woods, rare ; gills very narrow. Sutton Holms.

R. virescens Fr. (Lat., becoming green, from the distinct colour of the pileus).

In woods, rare. Birches Copse, where it borders on Hyles.

R. furcata Fr. (Lat., forked, gills forked).

In woods and grass under trees ; uncommon. Furze Common Copse. Sutton Holms.

R. vesca Fr. (Lat., eatable).

Rather common ; smells of crab ; edible, good. Castle Hill Wood. Ferndown. Furze Common Copse. Great Down Copse. Sutton Holms.

R. depallens Fr. (Lat., turning pale, after being reddish at first).

Said to be frequent in woods ; edible. Castle Hill Wood. Furze Common Copse.

R. cyanoxantha (Schaeff.) Fr. (Gr., blue and yellow).

In woods, etc., frequent ; edible. Castle Hill Wood. Furze Common Copse. Great Down Copse.

Series B. *Tenaces. Taste acrid, from the first.*

R. fellea Fr. (Lat., full of gall, bitter).

In woods, chiefly beech ; straw-coloured, poisonous ; not common. Castle Hill Wood. Great Down Copse.

R. drimeia Cke. (Gk., pungent, from the taste).

In pine woods ; distinguished by the purple pileus, clear yellow gills, and acrid taste ; common. Branksome Park. Colehill. Plantation S. of Dagon's Road Station. Ferndown, *Mrs. Pringle*. Lower Mannington plantation.

R. ochroleuca Fr. (Gr., yellow and white).

Pileus yellow ; gills white ; common in woods.
Plantation S. of Daggon's Road Station. Furze
Common Copse. Great Down Copse.

R. foetens Fr. (Lat., stinking).

Reputed poisonous ; said to be common.
Seen only in Furze Common Copse.

R. emetica Fr. (Lat., making sick).

In woods, chiefly beech ; poisonous ; said
to be frequent. Belt on E. side of St. Giles'
Park. Holt Wood.

R. fragilis Fr. (Lat., easily broken).

In woods, common ; like the last, but smaller,
more fragile ; poisonous. Castle Hill Wood.
Great Down Copse. Sutton Holms. Var.
violacea Ruélet. Pileus bright violet, with a
whitish margin. Castle Hill Wood. Ferndown.
Witchampton.

Genus 15. **CANTHARELLUS** Adans. (Gr. *kantharos*, a
sort of drinking-cup, from the shape of some species).
Gills decurrent, narrow, forking, margin thick.

C. cibarius Fr. (Lat., fit for food).

Reported as common in woods ; egg—yellow
in colour ; edible. Birches Copse. Furze
Common Copse and one or two other woods in
Edmondsham.

C. aurantiacus Fr. (Lat., of orange colour).

Under fir-trees in woods ; bright orange ;
reputed poisonous ; common. Branksome Park.
Broadstone. Colehill. Plantation S. of Daggon's
Road Station. Furze Common Copse.

C. tubaeformis Fr. (Lat., trumpet-shaped).

In woods on the ground and on rotten wood ;
yellowish-brown above, gills smoky-yellow ; not
very common. Castle Hill Wood. Plantation
S. of Daggon's Road Station.

C. infundibuliformis Fr. (Lat., funnel-shaped).

On the ground and on rotten wood under trees ; pileus perforated at the base and opening into the hollow stem ; not common. Branksome Park.

Genus 16. **NYCTALIS** Fr. (Gr., *nyktos*, of the night, from living in dark places) Parasitic on decaying fungi.

N. asterophora Fr. (Gr., bearing stars, from the stellate conidia sprinkling the pileus).

On decayed plants of *Russula nigricans* ; gregarious ; rare. Ferndown, *Mrs. Pringle*.

Series B. *Tenaces*. Leathery,
not putrefying.

Genus 17. **MARASMIUS** Fr. (Gr., to wither or shrivel, which the species do instead of rotting).

M. peronatus Fr. (Lat., booted, from the woolly covering of the base of the stem).

Among dead leaves in woods ; considered common. Creech Hill Copse. Furze Common Copse. Belt on E. side of St. Giles' Park.

M. oreades Fr. (Gr., mountain nymphs, from its forming "fairy rings"). "Fairy-ring Champignon."

In pastures, in rings which spread outward year by year ; excellent eating ; common. Pastures in Edmondsham.

M. calopus Fr. (Gr., fair-footed).

On twigs, roots of grass, etc. ; rare (absent from the New Forest list). Among moss in plantation S. of Daggon's Road Station.

M. ramealis Fr. (Lat., of branches, from its habitat).

On bramble stems, twigs, etc. ; white, discoloured brown ; common. Castle Hill Wood. Furze Common Copse. Witchampton.

M. androsaceus Fr. (Gr., like some zoophyte).

On fallen leaves and twigs ; hedgerows, under trees, etc. ; said to be common. On dead oak leaves, Castle Hill Wood.

M. Hudsoni (Pers.) Fr. (Named after Hudson).

On fallen holly leaves ; rare ; pileus covered with purple hairs. Holt Wood, *Mrs. Baker*.

M. epiphyllus Fr. (Gr., growing on leaves).

On dead leaves and twigs ; pileus white very small, stem filiform, long in proportion, minutely velvety ; not uncommon. Edmondsham and Goatham, pointed out to me by W. R. Linton in 1907. Belt E. side of St. Giles' Park.

Genus 18. **LENTINUS** Fr. (Latin, *lentus*, tough, pliant, from the nature of the species).

L. cochleatus Fr. (Lat., spiral, like a snail-shell).

On stumps in woods ; not common ; edible, with a faint odour of anise. Great Down Copse.

Genus 19. **PANUS** Fr. (A word used by Pliny for a swelling or tumour).

P. stypticus Fr. (Gr., *styptikos*, astringent, from the pungent taste).

On decaying stumps and twigs ; cinnamon-colour, stem short, lateral ; common. Edmondsham. Ferndown. Great Down Copse to Maldry Wood. Witchampton.

Section 2. Rhodosporeae (spores pink or salmon).

Genus 20. **LENZITES** Fr. (After Lenz, a German botanist).

L. betulina Fr. (Lat., of birches, from its habitat).

On trunks and stumps, especially birch ; fan-shaped, sessile ; said to be common in the N. Forest. Birches Copse.

Genus 21. **PLUTEUS** Fr. (Lat., *pluteus*, a conical shed, from the shape of the pileus).

P. cervinus (Schaeff.) Fr. (Lat., deer-like, from its fawn colour). Gills free ; no volva or ring.

On stumps and half-buried wood ; umber, turning dark brown. Not uncommon, but only found in this district by Mrs. Baker at Witchampton.

Genus 22. **ENTOLOMA** Fr. (Gr., *entos*, within, *loma*, a fringe, probably referring to the innate character of the partial veil).

E. sinuatum Fr. (Lat., from the margin of the pileus being wavy, sinuate).

In deciduous woods ; poisonous ; less frequent than in the N. Forest. Sutton Holms.

E. lividum (Bull.) Fr. (Lat., lead-coloured).

In dry woods or under trees ; poisonous ; rare. Under a belt of trees in Edmondsham Rectory garden.

E. prunuloides Fr. (Lat., resembling *prunulus*, i.e. *Clitocybe prunulus*, which it is said to do in its scent).

Among moss and grass ; smell strong of new meal ; like **E. lividum**, but much smaller ; uncommon. Furze common copse.

E. jubatum Fr. (Lat., maned or crested).

Among grass and moss ; mouse-coloured, fibrillose ; not common. Castle Hill Wood. Great Down Copse.

E. sericellum Fr. (Lat., silky).

Among grass ; small, white ; not common. By belt of trees E. side of St. Giles' Park.

E. rhodopolium Fr. (Gr., rosy-grey).

In woods ; pileus brown, then pale ; stem long, mealy at the top ; uncommon. Sutton Holms.

E. costatum Fr. (Lat., ribbed, the gills having raised veins).

In damp meadows ; like **E. sericeum**. but larger, and without scent ; rare ; moist. Pasture between Romford and Birches Copse.

E. nidorosum Fr. (Lat., reeking, from the peculiar alkaline smell).

In woods ; said to be frequent. Woodland ground by Edmondsham Park. Furze Common Copse.

Genus 23. **CLITOPILUS** Fr. (Gr. *klitos*, a declivity, *pilos*, a cap, from the decurrent gills). Agrees in structure with **Clitocybe** in the *Leucosporae*.

C. prunulus (Scop.) Fr. (Lat., a little plum—compact shape ?). “ Plum mushroom ” ; “ Vegetable Sweet-bread.”

In woods ; edible and of excellent flavour ; said to be common, in the N. Forest. Edmondsham Rectory, under trees. Furze Common Copse. Great Down Copse.

Genus 24. **LEPTONIA** Fr. (Gr., *leptos*, slender, from the habit of the species, most of which are small). Gills adnate to the stem, but soon separating ; stem polished, hollow.

L. lampropoda Fr. (Gr., shining foot, from the polished steel-blue stem).

Among grass ; not common. Furze Common Copse. Sutton Holms.

L. solstitialis Fr. (Lat., of summer, growing in sunlight ?).

Among grass ; with none of the blue tinge common to the genus ; rare (not in the N. Forest list). Broadstone.

Genus 25. **NOLANEA** Fr. (Lat., *nola*, a little bell, from the shape of the pileus). Gills adnexed, or free. Stem cartilaginous, hollow.

N. pascua (Pers.) Fr. (Lat., of pastures).

In woods and pastures ; pileus livid-bistre, but variable ; common. Broadstone. Edmondsham Park. Near Furze Common Copse. Near Mount Pleasant, and near Romford.

Genus 26. **CLAUDOPUS** W. G. Smith. (Lat., *claudus*, lame, and Gr., *pous*, a foot, from the crooked or absent stem).

C. variabilis W. G. Smith. (Lat., variable).

On dead wood, stumps, or sticks ; sessile laterally, or at length with a short stem-like base ; gills white, then pale salmon ; regarded as common. By Birches Copse. On fir and lime, Edmondsham Rectory Garden. Furze Common Copse.

Section 3. Ochrosporae (spores of various shades of brown).

Genus 27. **PHOLIOTA** Fr. (Gr., *pholis*, a scale, many species being scaly). Gills free. Stem with a ring).

P. squarrosa (Muell.) Fr. (Lat., with bristling scales).

In clusters at the base of trees and stumps ; edible ; infrequent. At the base of an apple-tree, Edmondsham, *W. R. Linton*. Witchampton.

P. spectabilis Fr. (Lat., showy).

On stumps and base of trees, clustered ; said to be common. Ferndown, where Mrs. Pringle first found it, and I later. Near Mount Pleasant.

P. marginata (Batsch.) Fr. (Edged, from the margin of the pileus being streaked).

On pine wood leaves ; rare. Fir copse near Castle Hill Wood.

Genus 28. **INOCYBE** Fr. (Gr., *is*, *inos*, fibre, *kube*, head ; from the character of the pileus). Stem ringless. Gills usually sinuate.

I. scabra (*Agaricus scaber*), Fr. (Lat., rough).

On the ground in woods ; uncommon. Stan-
ridge Plantation S.E. of Cranborne. Furze
Common Copse. Belt of beech E. side of St.
Giles' Park.

I. lacera (*Ag. lacerus*) Fr. (Lat., torn, from the scaly pileus).

In woods, etc. ; rare (absent from N. Forest
List) ; distinguished from *I. scabra* by the inside
of the stem becoming reddish. Belt of beeches on
E. side of St. Giles' Park.

I. rimosa (Bull.) Fr. (Lat., cracked, from the pileus).

On the ground in woods and shade ; not
frequent. Field of Edmondsham Park surrounded
by woods. Great Down Copse.

I. geophylla (Sow.) Fr. (Gr., earth-leaved, probably from the clay-coloured gills).

Among grass in woods and under trees ;
frequent, pileus silky, at first white, then violet to
lilac. Plantation S.E. of Cranborne. Plantation
S. of Daggon's Road Station. Edmondsham
Park, and Rectory garden. Furze Common
Copse. Great Down Copse.

I. scabella Fr. (Lat., rather rough).

Among grass in woods ; not very common ;
pileus reddish or yellowish-brown. Furze
Common Copse. Belt of beeches E. side of St.
Giles' Park. Sutton Holmes.

Genus 29. **HEBELOMA** Fr. (Gr., *hebe*, youth, *loma*, fringe,
from the character of the veil). Pileus smooth,
more or less viscid ; stem fibrous, without a ring ;
gills sinuate.

H. fastibile Fr. (Lat., nauseous, from the smell).

Pileus yellowish, then paler, soon flat ; rather
frequent. Goatham Plantation. Great Down
Copse. Maldry Wood, St. Giles.

H. glutinosum (Lindg.) Fr. (Lat., sticky, like glue).

Among dead leaves in woods ; pileus like the last, but with white squamules sprinkled in the glutinous film ; not common. Dead Man's Corner, Cranborne.

H. mesophaeum Fr. (Gr., dusky in the centre).

Frequent in the N. Forest ; rare in this district. Branksome Park.

H. crustuliniforme (Bull.) Fr. (Lat., shaped like small buns).

In grass and woods ; said to be poisonous, and frequent in the N. Forest. Only seen at Sutton Holms.

Genus 30. **FLAMMULA** Fr. (Lat., *flamma*, a flame, the colour of many species). Stem fleshy ; gills usually decurrent, not sinuate.

F. lupina Fr. (Lat., *lupus*, a wolf, from its strong smell).

Among grass ; rare. Grass bank by the roadside, Edmondsham.

F. carbonaria Fr. (Lat., belonging to charcoal, from its habitat).

On burnt earth, charcoal, etc. ; densely gregarious ; not common. Branksome Park. Broadstone.

F. inopoda Fr. (Gr., with fibrous stem).

On stumps, chiefly pine ; gregarious ; rare. Belt E. side of St. Giles' Park.

F. hybrida Fr. (Lat., mongrel).

On the ground among sticks or on stumps ; very rare (not in the N. Forest list). Wood N. of Ferndown.

F. sapinea Fr. (Lat., belonging to pines).

On stumps and decaying fir-branches, in woods ; gills yellow, then tawny-brown ; not uncommon. Branksome Park, *Mrs. Baker*. Broadstone. Lower Mannington Plantation.

Genus 31. **NAUCORIA** Fr. (Lat., *naucum*, a trifle, from the slight vestige of a veil).

N. melinoides (Bull.) Fr. (Gr., honey-like, from the colour).

Among short grass in pastures and woods ; said to be frequent, and to resemble *Galera hypnorum*, but for its toothed gills. Stanridge Plantation S.E. of Cranborne.

N. semiorbicularis (Bull.) Fr. (Lat., hemispherical).

In short grass ; not common. Broadstone. Way-side turf, S. of Daggons Road Station, Ferndown.

Genus 32. **GALERA** Fr (Lat., *galerum*, a hood or cap, the shape of the pileus.)

G. hypnorum (Batsch.) Fr. (A Latin genitive of *hypnum*, a Greek name for a moss).

Among moss in woods ; very common. Broadstone. Castle Hill Wood. Ferndown. Furze Common Copse. Sutton Holms.

Genus 33. **TUBARIA** W. G. Smith. (Lat., *tuba*, a trumpet, the shape of some of the species). Gills more or less decurrent, triangular.

T. furfuracea (Pers.) W. G. Smith. (Lat., like bran, from the scurfy margin of the pileus.)

On twigs, chips, etc., on the ground ; rather common. Castle Hill Wood. Fields, Edmondsham. Ferndown, *Mrs. Pringle*. Goatham Plantation. Birches Copse.

Genus 34. **CREPIDOTUS** Fr. (Lat., *crepida*, a sandal, in allusion to the shape and colour). Stem eccentric, lateral, or wanting. Allied to *Pleurotus*, but spores rust-colour.

C. mollis Fr. (Lat., soft).

On dead trunks, stumps, etc. ; rare. On dead apple trunks, Edmondsham Rectory orchard.

C. applanatus Fr. (Lat., on a level, from the flat pileus ?).

On rotten wood ; rare. On a post, Edmondsham Rectory field. Furze Common Copse.

C. alveolus Lasch. (Lat., a gaming-board, from its plane surface).

On trunks ; rare. Creech Hill Wood, St. Giles, on a birch trunk (so named by W. R. Linton).

C. epibryus Fr. (Gr., on moss).

On mosses, leaves, etc. ; rare. Sutton Holms.

Genus 35. **CORTINARIUS** Fr. (Lat., *cortina*, a round vessel, a cauldron, from the roundly convex pileus). A well-marked genus, with cobweb-like veil ; gills often purple at first, bright brown at maturity from the rust-coloured spores. For convenience it can be divided into five sub-genera.

Sub-genus I. *Phlegmacium*, Fr. (Gr., *phlegma*, shining moisture, from the glutinous pileus.) Stem firm, dry, often bulbous. All growing in woods, on the ground unless otherwise stated.

C. varius Fr. (Lat., variable).

Also in pastures ; uncommon. Lower Manington Plantation.

Sub-genus II. *Myxaium* Fr. (Gr., *muxa*, mucus). Pileus and stem glutinous.

C. mucifluus Fr. (Lat., flowing with mucus).

Not common. Plantation S. of Daggon's Road Station.

C. elatior Fr. (Lat., taller).

Chiefly under pine trees ; rather common. Castle Hill Wood. Great Down Copse. Hyles' adjoining Birches Copse.

Sub genus III. *Dermocybe* Fr. (Gr., *derma*, skin, *cube*, head, from the thin pileus). Pileus dry, silky, at length glabrous.

C. ochroleucus Fr. (Gr., yellowish-white).

Rather bitter to the taste, inodorous ; not common. Ferndown, *Mrs. Pringle*. Belt on E. side of St. Giles' Park.

C. caninus Fr. (Lat., of a dog, in the sense of mean).

Common. Birches Copse. Castle Hill Wood. Plantation S. of Daggon's Road Station. Sutton Holms.

C. myrtilinus Fr. (Lat., like myrtle, in colour).

Near beech-trunks, etc. ; rare. Sutton Holms.

C. cinnabarinus Fr. (Lat., colour of dragon's blood, vermilion).

Rather frequent ; with a smell of radishes. Colehill, near Wimborne. Holt Wood. Plantation, Lower Mannington.

C. cinnamomeus Fr. (Lat., cinnamon-coloured).

Pine-woods chiefly ; common in the N. Forest. Branksome Park. Plantation S. of Daggon's Road Station. Var. **semisanguineus** Fr. (Lat., half-bloody), with gills usually blood-red. Besides the two localities above, where it was frequent, also in a wood near Ferndown.

Sub-genus IV. *Telamonia* Fr. (Gr., *telamon*, a bandage).

Stem banded, or scaly, below ; flesh of pileus thin.

C. torvus Fr. (Lat., wild).

Not uncommon. Castle Hill Wood. Great Down Copse. Sutton Holms.

C. hinnuleus Fr. (Lat., of a young stag ; fawn-coloured).

Copse adjoining Hyles' and Birches Copse.

C. brunneus Fr. (Lat., brownish).

Not common. Castle Hill Wood. Belt on E. side of St. Giles' Park.

- C. incisus** Fr. (Lat., cut into, as the pileus becomes).

Uncommon. Broadstone. Belt on E. side of St. Giles' Park.

- C. hemitrichus** Fr. (Gr., half hairy).

Margin of pileus fibrillose ; stem very floccose ; said to be frequent in N. Forest list. Only found in Castle Hill Wood.

Sub-genus V. *Hygrocybe* Fr. (Gr., *hugros*, moist, *cube*, a head, from the moist pileus). Pileus pale, when dry ; flesh very thin.

- C. armeniacus** Fr. (Lat., from *armenium* (*pomum*), the apricot, from the general colouring).

Chiefly in pine woods ; rare (absent from N. Forest list). Birches Copse.

- C. saturninus** Fr. (Lat., like Saturn, gloomy, from its habitat).

Grassy places, woods ; rare. Sent by Mrs. Baker, from Witchampton.

- C. bicolor** Clarke. (Lat., of two colours).

Stem violet at the base, whitish above ; uncommon. Castle Hill Wood.

- C. jubarinus** Fr. (Lat., radiant).

In pine woods, on pine leaves, etc. ; pileus bright tawny cinnamon, shining ; uncommon. Broadstone. Plantation, Lower Mannington.

- C. decipiens** Fr. (Lat., deceptive, resembling other species).

Rather frequent. Broadstone. Castle Hill Wood. Furze Common Copse.

- C. acutus** Fr. (Lat., sharp, pointed ; from the pointed umbo).

Distinguished by the conical umbo ; not uncommon. Broadstone. Plantation S. of Daggon's Road Station. Belt on E. side of St. Giles' Park. Sutton Holms.

Genus 36. **PAXILLUS** Fr. (Lat., a small stake, a peg).
Gills decurrent ; pileus involute.

P. involutus Fr. (Lat., rolled inwards ; from the margin of the pileus).

Edible, but hardly worth eating ; common in the N. Forest. Plantation S. of Dagon's Road Station. Ferndown, *Mrs. Pringle*.

P. panuoides Fr. (Gr., shell-shaped ? from the pileus).

On decayed pine wood ; rare. Wood N. of Ferndown.

Section 4. Melanosporæ. Spores
black, purplish- or brown-
ish-black.

Genus 37. **AGARICUS** Linn. pro pte. (Of Greek origin, *agaricon*, Latinised by Pliny ; a fungus growing on timber).

A. arvensis Schaeff. (Lat., of arable ground). "Horse Mushroom."

In pastures, usually under trees ; edible, but not always wholesome ; not frequent. Edmondsham Park. Field just E. of Birches Copse.

A. campestris L. (Lat., belonging to the plain). "Common Mushroom."

In open fields ; common, but unevenly distributed. Several fields in Edmondsham, and towards Verwood Station.

Genus 38. **STROPHARIA** Fr. (Gr., *strophos*, a twisted band, in reference to the ring). Gills adnate or adnexed ; with a distinct ring.

S. aeruginosa (Curt.) Fr. (Lat., of verdigris, from the colour of the gluten).

In woods and pastures ; poisonous ; reported common in the N. Forest, not so in this district. Plantation S.E. of Cranborne. Furze Common Copse.

- S. inuneta** Fr. (Lat., anointed ? from the gluten ; or hooked, from the decurrent teeth of the adnate gills).

Among grass, in woods, etc. ; uncommon.

Furze Common Copse.

- S. merdaria** Fr. (Lat., of dung).

On drying dung in pastures or woods ; not very frequent, or overlooked. Stony field E. of Birches Copse.

- S. semiglobata** (Batsch.) Fr. (Lat., hemi-spherical, from the pileus).

On dung ; common. Branksome Park. Fields near Furze Common Copse. Near Romford.

Genus 39. **HYPHOLOMA** Fr. (Gr., *huphos*, a web, *loma*, a fringe, from the partial veil fringing the pileus).
Gills adnate or sinuate.

- H. sublateralitium** (Schaeff.) Fr. (Lat., almost brick-coloured).

On or about old stumps, in woods and hedge-rows ; poisonous ; common. Birches Copse. By Castle Hill Wood. Plantation S. of Daggon's Road Station. Near Mount Pleasant. Witchampton.

- H. capnoides** Fr. (Gr., smoke-like, from the colour of the gills).

On the ground and on trunks in pine-woods ; fasciculate ; rather frequent. Plantation S. of Daggon's Road Station. Furze Common Copse. Great Down Copse. Plantation, Lower Mannington. Near Mount Pleasant.

- H. epixanthum** Fr. (Gr., yellowish-brown, tawny).

On old fir stumps, etc. ; not common. Wood N. of Ferndown (" apparently this, but dried up," J. C. Rayner).

- H. fasciculare** (Huds.) Fr. (Lat., in little bunches ; from its tufted habit).

On old stumps, etc.; often forming dense clusters; very common. Woods in Edmondsham. Branksome. Plantation S.E. of Cranborne. Plantation S. of Daggon's Road Station. Fern-down, *Mrs. Pringle*. Sutton Holms. Witchampton.

H. velutinum (Pers.) Fr. (Lat., velvety).

In fields, woods, and roadsides; uncommon, more frequent in the N. Forest. Great Down Copse.

H. appendiculatum (Bull.) Fr. (Lat., with small appendages, from the relics of the veil on the margin of the pileus).

On stumps in woods; not common. Castle Hill Wood.

H. hydrophilum (Bull.) Fr. (Gr., loving water; from the gills exuding drops of water).

On stumps in woods; similar to the last, but differing in the character above mentioned; frequent. Plantation S. of Daggon's Road Station. Castle Hill Wood. Ferndown. Furze Common Copse. Plantation, Goatham.

Genus 40. **PSILOCYBE** Fr. (Br., *psilos*, bare, naked, *cube*, head, no veil being apparent on the pileus). Stem tough; margin of pileus incurved at first. Spores purplish or slate-colour.

P. semilanceata Fr. (Lat., almost lance-shaped).
"Liberty Cap."

On pastures, etc.; gregarious; poisonous; common. Furze Common Copse. Near Romford. Sutton Holms. Var. **caerulescens**, Cooke (bluish). Rhymes Copse.

P. spadicea Fr. (Lat., date-brown).

On the ground about stumps; not frequent. Sutton Holms.

P. fœnisecii (Pers.) Fr. (Lat., of cut hay, from its habitat).

Among grass ; edible ; not common. Furze Common Copse. Sutton Holms (apparently, but specimen rather old).

Genus 41. **PSATHYRA** Fr. (Gr., *psathuros*, friable, falling to pieces). Pileus conical or bell-shaped ; stem hollow, fragile ; like *Mycena*, but spores dark purple-brown.

P. corrugis (Pers.) Fr. (Lat., wrinkled, on the pileus).

In pastures ; not common. E. side of St. Giles' Park.

Genus 42. **BOLBITIUS** Fr. (Gr., from a word for cow dung, a frequent habitat). Fragile ; gills dissolving ; spores rust-coloured.

B. fragilis Fr. (Lat., fragile).

On dung and among short grass ; rare (not recorded in the N. Forest List). Plantation S.E. of Cranborne. Edmondsham Rectory field.

Genus 43. **COPRINUS** Pers. (Gr., *kopros*, dung, the frequent habitat). Gills dissolving into a black fluid. Spores black.

C. atramentarius Fr. (Lat., inky ; from its melting into a black fluid).

About old stumps, and on rich soil ; usually in strong clusters ; edible ; not very common. Edmondsham, in three central localities.

C. fimetarius Fr. (Lat., of the dung-hill, from its habitat).

Rare ; absent from the N. Forest List ; solitary or clustered. In or near Creech Hill Wood, St. Giles.

C. micaceus Fr. (Lat., sparkling, glittering, from the minute particles of crystalline oxalate of lime covering the young pileus).

About stumps and old posts ; local, more common in the N. Forest. Edmondsham Rectory garden, and field in park. Withy Beds, Cricchel.

C. deliquescens Fr. (Lat., melting, dissolving).

On stumps and heaps of dead leaves ; rather rare ; differs from *C. atramentarius* in being more slender, and in the gills being free and more separate. Creech Hill Wood, St. Giles.

C. tardus Karst. (Lat., slow—of development ?).

On the ground. Creech Hill Wood (probably this species, *J. C. Rayner*).

C. radiatus Fr. (Lat., from the pileus soon splitting in radiating fissures).

On horse-dung in grassy woods ; very delicate and ephemeral. Recognised by J. C. Rayner in Furze Common Copse.

C. plicatilis (Curt.) Fr. (Lat., in folds, from the splitting and revolute pileus).

In rich pastures, etc. ; reported as common in N. Forest. Rhymes, a field outside Furze Common Copse.

Genus 44. **PANAEOLUS** (Gr., *pan*, all, *aiolos*, variegated, from the appearance of the gills).

P. campanulatus (Linn.) Fr. (From a late Latin word for a little bell).

On ground where manure lies ; said to be common. Belt E. side of St. Giles' Park.

Genus 45. **PSATHYRELLA** Fr. (Gr., *psathyros*, friable).
Pileus striated ; spores black.

P. gracilis (Pers.) Fr. (Lat., slender)

Roadsides, banks, etc. ; not common. Plantation S.E. of Cranborne. Edmondsham Park. Sutton Holms.

P. atomata Fr. (Gr., powdered with atoms, which glisten on the pileus).

Pastures, etc.; rare (not common in the Forest). E. side of St. Giles' Park.

P. disseminata (Pers.) Fr. (Lat., scattered about).

Tufted, about the trunks of trees or on the ground; less frequent than in the Forest. Sutton Holms.

END OF PART I.

To be concluded with Part II. in the next volume of the Proceedings.



Phenological Report on First Appearances of Birds, Insects, &c., and First Flowering of Plants

IN DORSET DURING 1913.

By W. PARKINSON CURTIS, F.E.S.

FOREWORD.



THE Members of the Club will miss at the head of these Notes the familiar name of our esteemed President, who has for so many years edited this part of our Report. At his request I consented to relieve him of the burden of his duties in this respect in order to leave him freer for the other duties of his office. I have, however, the assistance of his notes as observer, and perhaps may be permitted to express the hope that the Club will have the benefit of his observations for many years to come. I am not quite so well equipped as he is either in regard to the topography of the western part of our native county or in regard to botanical knowledge. I shall endeavour to improve the former this summer by

casual "trespassing," and the latter will be fortified by the kind assistance of the Rev. E. F. Linton.

It is a matter for reproach that we have so few observers ready to fill our schedules, seeing the number of our Members ; and this fact was brought prominently before me some time since, when I was asked to inform the Brit. Ornithological Union on the distribution and frequency of occurrence of the Nightingale in West Dorset. In fact, Mr. Rodd is the most westerly of our observers, and so I could only reply to the B.O.U. that little or nothing was really known as to the distribution of the Nightingale in West Dorset. Accordingly I appeal to those of our Members who are able and willing to make careful and accurate records to send returns.

I might perhaps here correct a mistake in the last report (Vol. XXXIV., p. 205), due to the state of flux that our scientific nomenclature is in at the present time, as a result of a failure to adhere to the Strickland code. *Ægithalis vagans* = *Acredula rosea* the Longtailed Titmouse, and not *Ægialitis hiaticola-major*, the British Ringed Plover.

The observers seem sometimes to put the first appearances of birds in the song column and *vice versa* ; no doubt on many occasions the two dates are coincident, but it would be an assistance to me, when the one column or other is not filled in, if the observer would put a pen through the blank, as in some cases where the birds are returned under the song column the bird is much more easily noted than the song, *e.g.*, *Muscicapa grisola*, with the result that one is in doubt as to whether the date be in the correct column.

The names (arranged alphabetically) of those who have sent returns are as follows, the initials prefixed in brackets to the names designate the responsibility for the record in the notes hereafter :—

(E.H.C.)	Eustace Harker Curtis	} Aysgarth, Poole.
(W.P.C.)	W. Parkinson Curtis	
(W.H.D.)	Revd. W. Hughes D'Aeth, Buckhorn Weston Rectory, Wincanton.	

- (S.E.V.F.) Revd. S. E. V. Filleul, All Saints' Rectory,
Dorchester.
- (J.M.J.F.) Revd. Canon J. M. J. Fletcher, The Vicarage,
Wimborne Minster.
- (E.F.L.) Revd. E. F. Linton, Edmondsham Rectory,
Dorset (post town, Salisbury).
- (G.R.P.) G. R. Peck, Muston Manor, Puddletown, Dor-
chester.
- (N.M.R.) Nelson M. Richardson, Monte Video, near
Weymouth.
- (E.S.R.) E. S. Rodd, Chardstock House, Chard.
- (J.R.) Revd. J. Ridley, Pulham Rectory, Dorchester.
- (E.E.W.) Miss Ellen E. Woodhouse, Chilmore, Ansty,
Dorchester.

MAMMALS.

Meles taxus (The Badger).—One was killed by the Canford keepers at Bear Cross, near Kinson. We observed the footmarks of one in Berewood. (W.P.C. and E.H.C.)

THE APPEARANCES, ETC., OF THE SCHEDULED BIRDS. SUMMER VISITORS—(continued).

Names of Birds.	Earliest previously recorded date for Dorset.	Edmond-sham. E. F. L.	Poole District. E. H. C. W. P. C.	Berewood. E. H. C. W. P. C.	Buckhorn Weston. W. H. D.	Ansty. E. E. W.	Dorchester G. E. P.	Dorchester. S. E. V. F.	Pulham. J. R.	Weymouth. N. M. R.	Chard. E. S. R.
(12) <i>Caprimulgus europaeus</i> The Goatsucker ..	A May 8 S .. N Aug. 17 D Aug. 29 A May 25	.. .. .. .. ..	May 4 .. *Sept. 16	May 1 .. .. .. ..	.. .. *May 13 .. ..	.. .. .. .. May 30	.. .. May 10 May 10 ..	.. .. .. .. ..	.. .. May 17 Sept. 1	.. .. .. .. ..	May 20 .. May 25
(13) <i>Turtur turtur</i> The Turtle Dove..	.. .. .. .. ..	.. .. .. .. ..	.. .. .. .. ..	.. .. .. .. ..	.. .. .. .. ..	.. .. .. .. ..	.. .. .. .. ..	.. .. .. .. ..	.. .. .. .. ..	.. .. .. .. ..	.. .. .. .. ..
(14) <i>Orex pretensis</i> The Landrail ..	D Sept. 1 A May 8 S .. D ..	.. .. .. ..	.. .. .. on this	.. .. .. species	.. .. .. infra.	.. .. .. ..	.. .. .. ..	.. .. .. ..	.. .. .. ..	.. .. .. ..	.. .. .. ..
(15) <i>Turdus pilaris</i> The Fieldfare ..	A Sept. 14 D Apl. 9 A ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	Nov. 7 .. ..	.. .. ..	.. .. ..	.. .. ..	March
(16) <i>Turdus iliacus</i> The Redwing ..	D Feb. 10 .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	March

WINTER MIGRANTS.

RESIDENTS.

Names of Birds.	Earliest previously recorded date for Dorset.	Edmond-sham. E. F. L.	Poole District. E. H. C. W. P. C.	Berewood. E. H. C. W. P. C.	Buckhorn Weston. W. H. D.	Ansty. E. E. W.	Dorchester G. E. P.	Dorchester. S. E. V. F.	Pulham. J. R.	Weymouth. N. M. R.	Chard. E. S. R.
(17) <i>Merula merula</i> The Blackbird ..	S Jan. 9 N Feb. 24 S Feb. 7	.. .. ..	Jan. 23 (21) .. ..	.. .. ..	*Jan. 1 Feb. 10 Jan.	Feb. 5 *Feb. 5 ..	.. .. ..	.. .. ..	Feb. 11 .. Mar. 7	Feb. 11....	......
(18) <i>Alauda arvensis</i> The Skylark ..	......	......	......	......	......	......	......	......	......	......	......
(19) <i>Trypanocorax frugilegus</i> The Rook ..	N Feb. 24 (22)	Mar. 7....	......	......	......	......	......	......	......	......	......

A—arrival, S—song, N—nest, D—departure, *—that the date of arrival, song, or nesting is earlier and the date of departure later than any previous record.

The Stations are arranged as near as may be from East to West.

(1) At Rempstone, Purbeck. (2) Young left nest. (3) Nest with 4 eggs. (4) It is difficult to know whether observers record a few notes or a full song. Whilst on the 13th April the male bird was uttering 3 or 4 notes in Berewood, it was not until 12th May that he sat up and warbled continuously his full song. (5) Three nests with 5 eggs each, 25th May nest with 5, 1st June nest with 5, and several with young. (6) July 27th young birds seen in Burley Old Plantation, New Forest. (7) W.H.D. on enquiry confirms date and record, which confirms a view I hold that the first migrants often go straight inland and do not remain on the littoral. (8) No distinction is made between the two races. (9) At Arish, Mell Gap. (10) Not previously recorded, taken from E.H.C.'s diary, 1916. (11) Nest and six eggs. (12) Two nests with 4 eggs each: 15th June young as big as their parents. (13) This bird must of necessity have wintered in the country, and does not represent any migratory movement from abroad. *P. rufus* (= *minor*) certainly winters sometimes, and there appears to be no reason to doubt that *P. trochilus* does also at times. I have communicated with the observer, who informs me that the bird was seen and watched by several members of the family, and that there is no room for doubt as to its identity. (14) Two families out of the nest still tended by parents. (15) Bird seen, but so momentarily that we have wanted confirmation, Keeper Allen told us he had heard the bird on the previous day. (16) This date is not the earliest known date for Dorset, as the late Mr. F. O. Pickard-Cambridge shot an immature bird in January on the edge of Poole Harbour; E.H.C. and W.P.C. both examined the bird at the time it was shot, but of course it did not represent any migratory movement. (18) At Wool. (19) At Cranborne. (20) The birds must have been here long before that. (21) And for several days previously. (22) For want of exactness in the directions in the form sent out it is difficult to know what is regarded as nesting. W.H.D. has apparently recorded repairs to nests, whilst E.F.L. and J.R. apparently mean actual sitting, as J.R. records young on 10th April. In the detailed notes below further remarks are made on many of the birds appearing in the Schedule. (23) See note as to a winter occurrence not relating to any migratory movement.

BIRDS.

Corvus corax (The Raven).—A good view of this bird at Arish Mell, 3rd August, 1913. (W.P.C. and E.H.C.)

Coccothraustes coccothraustes (The Hawfinch).—The Rev. O. Pickard-Cambridge reported that a pair of these birds were back on the Rectory lawn at Bloxworth again, and enquired of me whether they had nested in Berewood. We believe they did so, but the nest, which was placed exactly where a nest was two years ago, was no longer accessible, as the branch below had broken off. (W.P.C.)

At Dorchester, seen on 19th December, 1913, and several times after. (J.R.)

Carduelis carduelis (The Goldfinch).—This bird is on the increase in the county; several pairs were seen by us in the spring; and on 28th September, 1913, at Handley Down we saw three large companies of finches in which the goldfinches were as 3 to 1. In this connection it is regrettable to note that at least one nest of young birds was taken and confined in captivity in Bloxworth, and that a bird catcher was loose in the neighbourhood of Dorchester to ply his nefarious trade for several weeks before being brought to book by the police. (W.P.C.)

Cannabina rufescens (The Lesser Redpoll).—1st March, 1913, about two dozen were seen at Canford. Their identity is certain. On the 2nd March, 1913, their number had been much increased in the same wood. They were busily engaged in pulling birch catkins to pieces. They had disappeared by the 15th March. (W.P.C. and E.H.C.)

Loxia curvirostra (The Crossbill).—Two seen in the fir trees at Kniton, near Canford, 23rd February, 1913. (W.P.C.)

Motacilla lugubris (The Pied Wagtail).—On March 24th, 1913, I noticed a considerable number of these birds whilst driving from East Lulworth to Bere Regis via Moreton and Affpuddle, and came to the conclusion that there had been an immigration. This was confirmed by Mr. Frank Hudson, of Parkstone, who subsequently informed me that he had

seen a number on the Sandbanks on March 23rd, where he had not previously noticed them. (W.P.C.)

Motacilla alba (The White Wagtail).—On the 4th October, 1913, one seen in company with *Motacilla lugubris* at Osmington. (E.H.C.)

Motacilla flava (The Grey-headed Yellow Wagtail).—“7th October, 1913. In Poole Park. I first thought it was an ordinary Yellow Wagtail, but its head seemed the wrong colour, so I stalked it and got a clear view, which placed its identity to my mind beyond doubt.” (E.H.C.)

Parus ater (The Cole Tit. This note refers to *Parus ater ater*, and not to *Parus ater-britannicus*, the British form).—23rd February, 1913, three seen at Canford in company with *Parus ater-britannicus* and *Regulus cristatus*, the company was about 300 strong; 21st December, 1913, one seen at Canford in company with *Parus ater-britannicus*, *Parus palustris-dresseri*, *Parus caeruleus*, and *Certhia familiaris*.

Egithalis vagans (The British Longtailed Titmouse).—On the 16th February, 1913, we saw a large company of these tits working through the Canford Estate from S.W. to N.E. E.H.C. counted 43 go by, whilst W.P.C. saw many go overhead accompanied by *Parus ater-britannicus*. We estimate that upwards of 300 passed, the largest flock we have ever seen. (E.H.C. and W.P.C.)

April 6th, 1913, a finished nest at Berewood, a second on the 27th April. 12th April, 1913, a finished nest at Canford. (This was deserted on the 3rd May.) 10th May, 1913, a finished nest at Canford with two eggs, about 1½ miles from the deserted nest. These birds took over a fortnight to complete the clutch, and the young did not leave the nest till the middle of June. (W.P.C. and E.H.C.)

Panurus biarmicus (The Bearded Tit).—Although not a Dorsetshire note we were pleased to see for the first time these birds alive at Stalham Broad, Norfolk, in August. (W.P.C. and E.H.C.)

Regulus regulus (The Golden-crested Wren).—“Gold crests have often come to window to feed this year. I have

never seen them do so before.” (J.R.) 15th April, 1913, an unfinished nest at Canford. (E.H.C.) (Note—This bird seems to be on the increase, and would probably increase still more if only the squirrels were kept in check ; according to our experience upwards of fifty per cent. of their nests are destroyed by this destructive rodent, in whose favour it is impossible to say anything.)

Sylvia sylvia (The White-throat).—First seen 27th April, 1913, at Creekmoor, Poole (W.P.C.), and not again till 12th May, 1913, when a pair was seen at Berewood. This bird was very scarce in 1913. (E.H.C.) 1st June, 1913, *Sylvia sylvia* seems very scarce, I never saw one all day (we were out hunting for 10 hours). (E.H.C.) 6th July, 1913, seen at Studland in company with other migrants apparently collecting preparatory to leaving. 2nd August, 1913, two parties, 6 and 10, seen at Kniton, Canford, on downward migration. 6th September, 1913, five or six *Sylvia sylvia* seen in Purbeck. 7th September, 1913, a dozen seen sitting on telegraph wires at Worbarrow. (E.H.C.) This was the last time this bird was seen, so evidently it departed about this date.

Sylvia curruca (The Lesser Whitethroat).—This bird seems to manage to get in and out of Dorset without being noticed. 12th May, 1913, at Berewood, E.H.C. heard one “kissing,” so it evidently had a nest near. 25th May, 1913, another was heard in Bloxworth. In the winter we found a nest belonging to this bird in Berewood. It is curious how it slips in and out of the county without being noticed, and its nest is rarely found in the county. (W.P.C. and E.H.C.)

Sylvia atricapilla (The Blackcap Warbler).—12th May, 1913, a pair seen at Berewood. 18th May, 1913, three males heard singing in the wood. (E.H.C.)

Sylvia simplex (The Garden Warbler).—12th May, 1913, seen in Berewood. 18th May, 1913, one male heard singing in Berewood. (E.H.C.)

Melizophilus undatus (The Dartford Warbler).—One seen at Hamworthy, 26th October, 1913. (E.H.C.)

Phylloscopus sibilator (The Woodwren).—10th May, 1913, first heard at Canford. 12th May, 1913, two heard at Berewood. 7th June, 1913, a pair feeding young in a nest on the north-east side of bank in a copse at Canford. Both birds brought food, though the male every now and again went into a tree above the nest to sing. Both birds came round us when we examined the nest and uttered a plaintive “weet weet weet,” notwithstanding that both had a bill full of lepidopterous larvæ. (W.P.C. and E.H.C.)

Locustella naevia (The Grasshopper Warbler).—3rd May, 1913, two heard singing loud and long at Canford, and again on the 5th May and again on the 10th. On the 17th May only one bird was singing in the same bog. On the 22nd we made strenuous efforts to find the nest, but although the male bird actually walked right over E.H.C.’s feet (!) we failed. Both birds seemed very tame. We saw the male again on the 5th June, but the birds were gone on the 7th. On the 6th July we saw eight or nine in company with other migrants at Studland; this was the last time. (E.H.C.)

Turdus musicus (The Song Thrush).—In full song at the beginning of January. (N.M.R.) 6th April, nest and four eggs at Berewood. (E.H.C.)

Daulias lusciniæ (The Nightingale).—This bird was more than usually abundant in Berewood, altogether we found six nests, and saw in addition several pairs feeding young; except for one nest, which for some reason did not hatch, the birds got off well. The nest that failed was in the vicinity of two robins’ nests and a hedge sparrow’s nest, all of which were wholly or partially destroyed, and we incline to think the sitting birds were destroyed. (W.P.C. and E.H.C.)

Cinclus aquaticus.—This bird brought off a brood at Wareham this year. (W.P.C.)

Colonel Frank G. L. Mainwaring, of Upwey, writes under date 3rd March, 1914 :—

“One of the most interesting birds here is the Dipper, or Water Ousel (of which I have seen two or three pairs flying about or at rest between the source and the mouth of the Wey). A pair of these

birds build their nest every spring in the 'dungeon' of the mill race, under the garden of the flour mill, opposite our house, and five or six years ago, I got a youth of seventeen named George Coombs who had an Al camera—to go into and along the Dungeon (the water was only six inches deep) with me one day, and with the light of magnesium wire he took a photo of the nest (which had two nearly full-fledged young Dippers in it) which was placed on a projecting brick of the wall about 3 feet above the water, and about six yards from the entrance of the dungeon."

Muscicapa grisola (The Spotted Fly-catcher).—An albino was seen in Major Devenish's grounds at Springfield, Rodwell, Weymouth, in company with typical individuals with which it agreed exactly in habits and mode of life, so I don't think there can be any question of its identity. It was accidentally killed in the neighbourhood afterwards. (N.M.R.)

Clivicola riparia (The Sand Martin).—An albino was seen on the Frome, Dorchester Fishing Club Upper Water, September 12th. (G.R.P.)

Hirundo rustica and *Chelidon urbica* (The House Martin).—There seems to be no doubt that one or other, possibly both, of these birds were observed in January at Upwey. Members of the Club will no doubt agree with me that the weight of evidence favours the Barn Swallow rather than the House Martin. I give below a short *résumé* of the evidence of the observers, so that every person can form an independent judgment. As to explanation, Colonel Mainwaring suggests remigration or hibernation. I think neither suggestion quite meets the facts. Hibernation in its strict sense of a period of winter quiescence, during which functions are suspended in part, is not known to exist amongst the Hirundinidæ, nor so far as I know in any other bird. I incline to the belief that the bird or birds seen were a very late brood, not strong enough to migrate with the general body, which were wandering about in an aimless way at a time when the migrating instinct would be quiescent; this, of course, is surmise, but surmise which would fit in with most of the known facts as to the migration of swallows, which neither remigration nor hibernation would do. The matter arose in

this way. The Rev. S. E. V. Filleul returned "two House Martins were seen by several people at Upwey on 10th January (s.c. 1913)." I editorially questioned the record as in duty bound, as it was most extraordinary. The Rev. S. E. V. Filleul then wrote me—

"I believe that the visit of two or three House Martins on January 10th, 1913, to Upwey was quite genuine. My mother wrote to tell me of it. I went down a day or two after and found that she could not swear to the fact, as her sight was not good enough, but only that she had seen the birds flying up and down, and they were said to be swallows. The gardener and boy saw them, and several people living close by remarked upon them. They were evidently House Martins, for I enquired carefully about that. I think that Colonel Mainwaring could tell you more about it; he lives in Upwey (Wabey House). In fact, I am not at all sure whether he did not actually see them. Of course they attracted a good deal of attention. The birds were not bred at Upwey, but were passing and were only seen that day. Some were recorded in Ireland quite as late as that I noticed."

I accordingly wrote to Colonel Mainwaring, who writes me as follows :—

"I beg to state that the Rev. S. E. V. Filleul is evidently mistaken in referring you to me regarding the supposed occurrence of the House Martin at Upwey on 10th January, 1913. I did not see any House Martins flying about here in January; but I did see a Swallow, and wrote to the Editor of the 'Field' on the 8th of January and reported the fact of my having seen a swallow on the 3rd, and such was duly inserted under the Notes and Queries, The Naturalist, in the 'Field' of 10th and 11th January, 1913. I also wrote to the Editors of the 'Morning Post' and the 'Dorset Chronicle' about it, as I thought such an occurrence most extraordinary."

On that evidence I would remark that Mr. Filleul's note is report, supported, however, by careful enquiry, and that Colonel Mainwaring's is first-hand evidence; that the birds were reported to Mr. Filleul first as Swallows and subsequently changed to House Martins, while Colonel Mainwaring's identification is "a swallow;" that young swallows have shorter tails than adult birds, and would therefore be more easily confounded with house martins; that while the

observers whose names are available are persons of superior education, they may not necessarily have seen the same birds ; that the mere occurrence of a swallow would tend to support the possibility of the occurrence of house martins, since the conditions which favoured the continuance of the one in this country would also render possible the continuance of the other.

Generally scarce, but present in great quantities on the morning of July 27th at Weymouth. (N.M.R.)

Dendrocopus major (The Great Spotted Woodpecker).—21st June, 1913, at Canford. (E.H.C.)

Dendrocopus minor (The Small Spotted Woodpecker).—Observed at Dorchester, January 21st. (J.R.) 21st December, at Canford, an adult male *Dendrocopus minor* observed searching for food. “ W.P.C. and I cycled over to Break Hill Wood, and immediately on our arrival were rewarded with a sight of an adult male *Dendrocopus minor* very busy searching for food on an oak tree of some age. It seemed to prefer searching for food on the smaller branches of the trees. We watched it with the glasses for a long time, and saw it searching on three trees. The hammering was very like that of *Dendrocopus major*, and very rapid indeed, and the only means I have of judging the incredible rapidity with which this little bird hammers is to compare the percussions with the exhaust explosions of a petrol motor. The speed of the woodpecker’s blows, to my ear, would about synchronize with the exhaust of our engine at 1,000 revolutions per minute. As it is a four-cylinder four-cycle engine there are two exhaust pops per revolution, which would give the speed of the woodpecker’s beak at 2,000 blows per minute, which seems almost incredible. However, one thing is certain, the bird’s head is an absolute blurr when it hammers, and it looks like a very high speed piece of machinery in motion. Another thing I noticed was that this bird ran down a hanging horizontal branch spirally backwards, feeding as it went. It did not stay long on the main trunk ; it simply flew on to it and off again, merely going to it as a

point of vantage. Likewise, the bird can hammer when it is in any position, but seems to prefer having his head above his body and not below the level of his body. He does not hammer many seconds consecutively, or I suppose his beak would get heated and spoil its temper. He looked very lovely in the bright sunlight with his crimson crest and strongly marked back; nevertheless he is not a very conspicuous little bird." (E.H.C.)

Micropus apus (The Common Swift).—8th July, great quantities of swifts flying around all the afternoon and evening, but all gone the next morning. Weymouth. (N.M.R.) June 22nd, at Poole, on our return at 8.50 p.m., just as darkness was falling, we saw about 50 swifts circling round and round and screaming. They were very high in the air, and looked quite small. As they circled round they kept banking and mounted higher and higher, until at last they could only just be discerned. Then they took a course about due south, straight toward Cherbourg, as straight as a line and at very high speed. Their direction would have taken them over no land except Sandbanks and the corner of Brownsea, and it is not reasonable to suppose they went to such great height for such a short journey, and nothing to take them to either place. (E.H.C.)

Asio otus (The Long-eared Owl).—At Canford, *circa* June 5th, one young bird destroyed and one made captive by Underkeeper Balson.

Astur palumbarius (The Goshawk).—One shot by Head-keeper Wren at Canford on the river about Nov. 2nd. In all probability this is the bird which was seen at Ringwood and Wareham. (W.P.C.)

Buzzard (species ?). Seen at Canford in the Spring by Keeper Wren on several occasions. (E.H.C.) A buzzard was slaughtered in the Wareham district and passed into the hands of a local bird stuffer, but the captor was sufficiently ashamed of his misdeed to give instructions that no information was to be given to me on the subject, so I do not know what species it was or by whom it was killed. (W.P.C.)

Falco æsalon (The Merlin).—One seen at Canford 2nd March, 1913. At about 3.30 p.m., at the foot of Blue Ball Hill, about $1\frac{1}{2}$ miles on the Dorchester side of Bridport, we observed a Merlin sail along in front of the car, doing 27 m.p.h. with the greatest ease. It continued for several hundred yards, and then suddenly threw up its wings and shot into the foot of the hedge, from which it emerged close in front of the car, with an *Accentor modularis* (hedge sparrow) in its claws. After this it shot off at such a pace that we could not catch up with it. (W.P.C. and E.H.C.)

Chaulelasmus streperus (The Gadwall).—Two shot at Wareham in the winter. (W.P.C.)

Glottis nebularius (The Greenshank).—Seen at Morden Park on 12th July, 1913, obviously a downward migrant. (E.H.C.)

Tringoides hypoleucus (The Common Sandpiper).—First seen at Dorchester 10th April (G.R.P.) on upward migration.

Limosa limosa (The Bartailed Godwit).—September 5th, at 1.45 a.m., I heard a flock of waders migrating over the house while I was in bed; it must have been a large flock, for I heard them for fully $1\frac{1}{2}$ minutes. There were at least two different sorts of birds, and from their calls to each other I took them to be Bartailed Godwits and Knots. I am satisfied as to the Godwits. (E.H.C.)

Stercorarius crepidatus (Richardson's Skua).—One seen on Poole Harbour July 24th. (G.R.P.). (I find on enquiry from Mr. Peck that this was an adult bird of the dusky race.)

Crex crex (The Corncrake or Landrail).—Seems to be one of our disappearing species, and according to my experience is steadily decreasing. The causes seem to be complex, but two principal ones may be cited—the prevalence of the horsed mower and reaper and binder, which ensures the destruction of every nest in its path and often of the young birds, and the sportsman's gun; that the latter is a deadly foe is proved by the information given to me that Mr. Cavendish Bentinck's shooting party secured 50 landrails in one day's shooting in Purbeck whilst the birds were on the downward migration.

The landrail is at no times difficult to shoot on the wing, and a tired landrail which is resting preparatory to crossing the Channel is a particularly easy victim. (W.P.C.) E.S.R. notes that this bird is almost extinct round Chard.

Caccabis rufa (The Spanish Redlegged or French Partridge).—Major Farquharson, Langton Herring, Dorchester, writes :—“The 1st Redlegged or French Partridge I knew in Dorset was caught in a rabbit trap, in the year 1871, on the Blandford Downs during a heavy snow storm. They have been put down about Lulworth, I believe. When I came here in 1907 there were but few, but these dry summers have helped them to increase very much, and the English Partridge has decreased. One or two days I have not shot a single English Partridge, all French. I am sorry, as I like the native.” (With this latter remark I agree, either on the table or in the fields our native bird is preferable. I believe the increase of *Caccabis rufa* to be attributable in part to its wildness, which keeps it out of the way of the gun ; in part its wariness, which enables it to escape the fox ; and in part its pugnacity, for it always succeeds in driving *Perdrix cinerea* from the immediate vicinity of its nest.—ED.)

E.S.R. notes that “it was a poor woodcock year in the South of England ; that young starlings were nearly fledged on the 25th January, 1913 ; that the dawn choruses in March and up to the 10th April were very short, five to ten minutes only ; the killing East and South wind and bitter cold effectually preventing, and generally that song was short and weak. On March 28th birds were in full dawn chorus for 15 minutes only, but up to May 12th, owing to cold and wet weather, I have heard the Nightingale and Spring migrants very little as yet.

Partridges (*Perdrix cinerea*) were scarce and wild. Red-legged Partridges (*Caccabis rufa*) are increasing in West Dorset and East Somersetshire.

After 41 years' observations I am of opinion that the Nightingales and Turtle Doves have been gradually coming Westward, and are more plentiful here.”

INSECTS.

Names of Insects.	Earliest previously recorded date for Dorset.	Edmondsham, E.F.L.	Poole District E.H.C. and W.P.C.	Buckhorn Weston W.H.D.	Ansty E.E.W.	Dorchester J.R.	Weymouth N.M.E.	Chard C.S.R.
(1) <i>Melolontha vulgaris</i> The Cockchafer ..	May 8	*May 25	..	..	..	..	July 4	
(2) <i>Lampyris noctiluca</i> The Glow worm ..	July 2	*Feb. 6	Mar. 28 (1)	*Feb 5	*Jan. 23 (7)	Feb. 11	Mar. 23	
(3) <i>Apis mellifica</i> The honey bee ..	Feb. 9	Mar. 6	..	..	Apl. 11 h	Nov. 14 (8)	Dec. 13 (11)	(14)
(4) <i>Vespa vulgaris</i> The wasp ..	Jan. 13	Mar. 6 h	..	..	..	female Jan. 30	Jan. 24 (12)	
(5) <i>Pieris rapae</i> The Small White Butterfly ..	Apl. 9	..	*Mar. 12	Apl. 20	*Apl. 3	Nov. 22 (9)	Nov. 28 (13)	
(6) <i>Euchloe cardamines</i> The Orange Tip ..	Mar. 27	Apl. 23	May 11	Apl. 22	..	Apl. 28	Apl. 20	
(7) <i>Epinephle jurtina</i> The Meadow Brown ..	June 11	..	June 29	*June 2	..	..	May 22	
(8) <i>Pararge aegeria</i> The Wall Butterfly ..	May 17	..	..	..	..	..	*June 1	
(9) <i>Gonepteryx rhamni</i> The Brimstone ..	Mar. 7	Apl. 20 h	(2) Apl. 20 (3) h	Apl. 20 h	..	Apl. 20 (10)	June 24	
(10) <i>Vanessa io</i> The Peacock ..	Feb. 11	Mar. 11 h	Mar. 24 (4) h	Mar. 26 h	Apl. 6 h	..	..
(11) <i>Pyrausta nivalis</i> The Red Admiral ..	May 1	Sept. 21	..	..	..	June 1	May 29	
(12) <i>Pyrausta cardui</i> The Painted Lady ..	Mar. 30	Oct. 16	..	May 30 (6)	..	Nov. 1	Aug. 5 (15)	
(13) <i>Tyria jacobaeae</i> The Cinabar ..	May 12	..	..	..	..	..	..
(14) <i>Abraaxa grossulariata</i> The Currant Moth ..	June 23	..	..	..	..	..	July 7	

h—Hibernated specimen. F—First seen. I—Last seen. Otherwise arrangement as in Schedule of Birds.

(1) At Sallow blossom. (2) Abnormally scarce. (3) At Berewood. (4) Very scarce around Poole always. (5) None seen. (6) As this was unlikely to be a hibernated specimen it may have been an immigrant, though no evidence of a general immigration came under my notice. (7) Visiting flowers. (8) J.R. notes, Aug. 16th, "Not seen a single bee out of doors for some weeks, though many humble bees seen;" very scarce in summer, increased later. (9) Wasps very common. (10) It is curious to note that the four observers noting *G. rhamni* all record the same date. My diary says, "A perfect spring day," W.P.C. (11) Quite lively flying from flower to flower. (12) Flying in garden. First worker, July 21. (13) Several workers, wasps not abundant. (14) A swarm at Ventnor, 2nd May, 1913. (15) Several worn and one fresh looking.

At Weymouth, 14th November, several humble bees flying about quite lively. August 26th, *Colias edusa* flying in garden, the only one seen.

The swarms of flies, resembling columns of smoke at the tops of the trees, were unusually dense and striking this year in early August, several columns usually over one tree, but some much larger than others. Some years ago I ascertained by capture that similar columns were composed of *Rhyphus fenestralis*, but whether both sexes were present I do not know. (N.M.R.)

NOTES ON INSECTS.

By W.P.C., Poole.—I did very little collecting this year indeed, and the bulk of my outdoor work was devoted to colour photography of lepidoptera in their natural positions of rest, and to a series of observations on the attacks by birds upon lepidoptera, upon both of which subjects further information is much needed.

The year opened with boisterous wet and cold weather, which retarded everything; but *Hybernica marginaria* put in an appearance on January 19th, and *Tortricodes hyemana* was about on the 16th February.

We had severe frosts in the third week of February.

The weather improved in March, and on March 15th both *Tephrosia bistortata* and *Chimabache fagella* put in an appearance; however, on March 21st we had driving snow and hard winds, followed by a slight return of warmth, which tempted *Vanessa io* out for an airing, and a speedy relapse into gales, cold, and rain. The early part of April I saw no insects, and April 20th was the first really warm spring day, and *Gonepteryx rhamni* turned out, being accompanied by *Micropteryx sepeella*(?) On the 24th April *Phycita fusca*, *Anarta myrtilli*, and *Boarmia cinctaria* were out in full force; *Saturnia pavonia* was flying about wildly. *Hemeorophila abruptaria* *Tæniocampa gothica* and *Eupithecia pumilata* were all seen at rest. The cold weather returned, but on

1st May, by beating larvæ at night, I got two *Triphæna fimbria* in Berewood, after which we had hurricanes and heavy rain, and it was altogether as bad a spring as I can remember.

Cyaniris argiolus appeared on the 11th May; *Pieris napi* on the 12th May. *Nemeobius lucina* and *E. pusillata* were out in Berewood on the 18th. About this date the weather settled in fine, and we had some glorious days in May, but they came too late to save the spring larvæ from a watery grave, as attested by the scarcity in the summer.

In the first week in June *Dicranura furcula*, from both Berewood and Canford, emerged in my breeding cages, and were followed by *D. bifida* from Cranborne. A few days in the later end of June were dull and wet.

On the 2nd July, 1913, I found a freshly-emerged *Coccus lignaperda*, which had formed its cocoon of mortar in a space in a brick wall where there had been a settlement, about 1ft. 6ins. from the ground.

On the 5th July, at Berewood, *Boarmia roboraria*, *B. repandata* ab *conversaria*, *Geometra papilionaria*, *Noctua* (*Agrotis*) *ditrapezium*, and *Phorodesma bajulata* all came to light. The latter in my experience being rare in the county.

On the 19th July *Hyria auroraria* was seen.

On the 20th July *Aventia flexula* and *Eilema deplana* were taken in the New Forest.

On the 27th July *Zeuzera æsculi*, which was found in 1912 at Canford by Headkeeper Wren, emerged, but unfortunately escaped, as my only hope of feeding it for 15 months or so was to feed it in a living apple tree in the garden.

On the 2nd August a late *Hemaris fuciformis* larva was found at Canford.

On the 3rd August *Colias edusa* male was taken at Arish Mell, and I was also fortunate enough to secure the most extreme *Lycæna corydon* var *fowleri* I have ever seen.

In August I was working the Broads of Norfolk with satisfactory results, though the nights were very moony and foggy. On the 28th August one specimen of *Aporophyla australis* was procured by E.H.C. at Badbury Rings.

21st September, 1913, at Cranborne, I found a cocoon of *Dicranura bifida* inside a loose piece of bark on a poplar. The space between the tree and the bark was packed absolutely full of *Amphipyra tragopogonis*, which was in all stages of dilapidation.

27th September, 1913, I took a late *Tapinostola fulva* flying over a heath swamp at Canford.

5th October, 1913, I again hunted the poplars at Cranborne for *D. bifida*. I found three, and E.H.C. found one. These were mostly spun just under the surface of the moss of the trees, and the outsides of the cocoons were covered with lichens or moss. The day was fine and warm after a heavy thunderstorm the preceding night, and E.H.C. thought the *bifida* cocoons looked a darker color after the rain; the best thing is to look for a patch of lichen which has no definite pattern on it, since the larva bites up the lichen, and it does not therefore retain its natural form.

FLOWERING PLANTS.

Name of Plant.	Previous earliest recorded date for Dorset.	Edmondsham. E.F.L.	Wimborne. J. M. J. F.	Berewood. E.H.C. W.P.C.	Buckhorn Weston W.H.D.	Ansty. E. E. W.	Dorchester. J.R.	Weymouth. N.M.R.	Charl. E. S. R.
(1) <i>Anemone nemorosa</i> Wood Anemone ..	Feb. 29 Mar. 8	*Feb. 22	*Mar. 6	..	*Mar. 2	Mar. 9	..	Mar. 17	Mar. 28
(2) <i>Ranunculus ficaria</i> Lesser Celandine ..	Jan. 13	*Jan. 1	*Jan. 1 (3)	..	*Jan. 1 (4)	*Jan. 1 (6)	*Jan. 1	Jan. 22 (8)	Mar. 18
(3) <i>Caltha palustris</i> Marsh Marigold ..	Feb. 23	Mar. 9	Mar. 6	..	*Feb. 6	Mar. 20	Mar. 12	..	Mar. 20
(4) <i>Cardamines pratensis</i> Meadow Lady's Smock ..	Mar. 21	*Feb. 8 (1)	Mar. 24	..	Mar. 26	*Mar. 20	Mar. 25	Apl. 20	
(5) <i>Sisymbrium Alliaria</i> Garlic Hedge-Mustard ..	Jan. 13	Mar. 31	Mar. 24	..	Mar. 24	Apl. 13	Apl. 6		
(6) <i>Viola reichenbachiana</i> Dog Violet ..	Jan. 12	Feb. 4	Mar. 6	..	*Jan. 1 (5)	*Jan. 1 (7)	..	Apl. 6	
(7) <i>Stellaria Holostea</i> Greater Stitchwort ..	Mar. 15	*Feb. 25	Mar. 24	..	Apl. 5	Mar. 20	Mar. 20	*Mar. 5	
(8) <i>Geranium Robertianum</i> Herb Robert ..	Apl. 19	*Mar. 10	May 9	..	*Jan. 19	Apl. 20			
(9) <i>Æsculus Hippocastanum</i> Horse Chestnut ..	Mar. 27 Apl. 22	May 3	May 8	*Mar. 16	May 6	*Mar. 14 May 11	*Mar. 14 Apl. 25	May 3	Mar. 28 May 15
(10) <i>Vicia sepium</i> Bush Vetch ..	Apl. 13	*Apl. 3	May 5	..	Apl. 16	Apl. 20			
(11) <i>Prunus spinosa</i> Blackthorn ..	Jan. 11 Mar. 2	Feb. 28 (2)	Mar. 30	..	Mar. 5	Feb. 3 Mar. 9	..	Mar. 21	Mar. 28 (9)
(12) <i>Rosa canina</i> Dog Rose ..	Mar. 15 Mar. 19	May 27	..	..	June 2	May 29	May 31	June 1	
(13) <i>Crataegus oxyacantha</i> Whitethorn ..	Mar. 5 Apl. 25	Apl. 25	May 12	..	May 13	May 14	*Feb. 26 May 14	*Apl. 20	May 15 (11)
(14) <i>Hedera Helix</i> Ivy ..	Perennial Sept. 5	..	..	..	Sept. 15	*Sept. 2	..	Sept. 18	
(15) <i>Cornus sanguinea</i> Dogwood ..	May 5	June 10	May 20	..	May 22	June 21	June 14		
(16) <i>Sambucus nigra</i> Elder ..	Jan. 7 Apl. 28	May 13	May 20	..	*Jan. 1 May 24	Dec. 8, 1912 May 25	Jan. 13 May 24	*Jan. 1 (10)	Mar. 28 (12)

FLOWERING PLANTS.—(continued).

Name of Plant.	Previous earliest recorded date for Dorset.	Edmondsham. E.F.L.	Wimborne. J. M. J. F.	Berewood. E. H. C. W.P.C.	Buckhorn Weston W.H.D.	Austrey E.E.W.	Dorchester J.R.	Weymouth N.M.R.	Charlton E.S.R.
(17) <i>Dipsacus sylvestris</i> Wild Teasel ..	June 27	Aug. 1	July 17	..	July 15	July 21	..	July 20	..
(18) <i>Scabiosa succisa</i> .. Devil's bit Scabious ..	July 27	Aug. 13	..	..	Aug. 1	..	..	..	..
(19) <i>Centaurea nigra</i> .. Knapweed ..	June 2	June 11	June 19	..	June 4	June 18	..	..	..
(20) <i>Carduus arvensis</i> .. Field Thistle ..	Feb. 22 June 12	.. June 28	.. June 12	..	*Feb. 3 June 29	June 23	..	*June 7	..
(21) <i>Tussilago Farfara</i> Coltsfoot ..	Mar. 25 Feb. 13	*Jan. 27 (13)	Mar. 6	..	Mar. 25 *Feb. 12	*Feb. 8	..	Feb. 28	..
(22) <i>Chrysanthemum</i> .. <i>Leucanthemum</i> ..	May 3	May 13	May 31	..	May 10	May 18	..	May 16	..
(23) <i>Ox-eye Daisy</i> <i>Achillea millefolium</i> Yarrow ..	June 5	June 21	June 22	..	June 30	July 2	..	July 9	..
(24) <i>Hieracium Pilosella</i> Mouse-ear Hawkweed..	May 13	June 11	May 26	..	May 20	May 29	..	..	..
(25) <i>Campanula rotundifolia</i> Harebell ..	June 27	*June 16 (14)	July 14	..	(17)	July 13	..	..	..
(26) <i>Convolvulus sepium</i> Greater Bindweed ..	June 7	July 11	June 18	..	July 4	June 27	..	July 6	..
(27) <i>Mentha aquatica</i> .. Water Mint ..	July 26	Aug. 11 (15)	*July 24	..	July 30	July 31	..	..	..
(28) <i>Nepeta Glechoma</i> .. Ground Ivy ..	Mar. 19	*Feb. 25	*Mar. 5 (16)	..	*Mar. 5	Apr. 3	Apr. 2	..	..
(29) <i>Corylus Avellana</i> .. Hazel (female flower) ..	Jan. 1	Jan. 30	Feb. 27	..	Jan. 9	Jan. 21	Jan. 4	Jan. 18	..
(30) <i>Primula veris</i> .. Cowslip ..	Mar. 5	Mar. 2	Mar. 17	..	*Feb. 25	*Jan. 12	*Feb. 15	Mar. 31	Apr. 17
(31) <i>Scilla nutans</i> .. Wild Hyacinth ..	Mar. 31	*Mar. 16	*Mar. 28	..	Jan. 7 *Mar. 5	*Mar. 10	Mar. 30	Apr. 7	Apr. 19

L—leaf. F—fruit. O—other symbols and arrangements of stations as before.
 (1) Three flowers out and one over; not seen again till Mar. 8. (2) Several flowers out. (3) In flower in the Wimborne district from 23rd Dec. 1912, onwards. (4) In abundance. (5) Has not ceased flowering. (6) In flower 19th Dec., 1912, and onwards. (7) Flowering all the year, though records may apply to species other than *V. reichenbachiana*. (8) In leaf before the beginning of the year. (9) Abundant. (10) And before. (11) A poor flowering year. (12) A good flowering year. (13) Growing on the surface, and so rather premature. (14) Brought in to the Schoolmistress at Edmondsham and recorded by her on June 16th, the specimen was dried and produced to Mr. Linton. (15) May have been out a week. (16) Brought in by children. (17) None seen.

FLOWERS.

Geranium lucidum was in bloom April 26th, *Lamium album* and *L. Galeobdolon*. White and yellow Dead Nettles, on same date. *Polygala vulgaris* (milk wort) both pink and blue. *Spiræa ulmaria*, meadow sweet, June 19th, Dorchester. J.R.

Viola canina, March 20th. *Orchis maculata* (Spotted Orchis) May 26th, Buckhorn Weston. (W.H.D.) Honeysuckle was in leaf at Canford on January 19th. Portugal Laurel and sallow in flower at Canford on February 19th. It was a very poor year for sallow blossom. *Viola canina* was in bloom as late as December 13th at Canford, and except for July primroses were in bloom in Berewood throughout the year. On December 14th we procured *Vicia sativa*, common Vetch, *Lychnis diurna*, red campion, *Lychnis vespertina*, white campion, and a good bunch of primroses in Berewood, whilst ground ashes and hazels were full of new green leaves. *Utricularia minor* and *Pinguicula lusitanica* were abundant in Morden Bog on July 18th. (W.P.C.)

E.R.S. Notes.—“Snowdrops out on January 4th, the earliest date I can remember seeing them. Primroses too have been seen out during December, 1912, and January, 1913.” A few snowdrops were out in a Chardstock garden 25th December, 1913.

ANNUAL EXHIBITION OF MALTING BARLEY, WHEAT, AND OATS, DORCHESTER, 18th October, 1913.
Malling Barley, 50, 30, and 20 Quarters, First Prize.

Exhibitor.	Grown at.	Soil and Sub-soil.	Crop 1912.	Crop 1913.	Seed.	When sown.	When cut.	Natural Weight per bus.	Quantity grown per Acre, Sacks.
*Mr. W. R. Taylor . Bedford and Dwight	White Lane ..	Chalk	Swedes..	..	English Archer	March 10	Aug. 14	56lb.	9
	Philliol's Farm ..	Light Loam Sand and Gravel (Bag-shot)	Peas ..	Oats	Webb's Chevalier 2½ bushels	March 1	Aug. 9	58½lb.	10½
Rev. J. G. Brymer ..	Puddletown ..	Sandy Loam and Gravel	Mangold and Turnips	Wheat	Hallett's Pedigree Chevalier (Scotch grown) 3 bushels	March 27	Aug. 21	56½lb	10

Wheat (White and Red).

*Sir E. Hambro ..	Delcombe Farm ..	Chalk and Loam	Clover	Mangold	Burgoyne Fife 3 bushels	Jan. 10	Aug. 15	65½	10
Mr. J. Shepard ..	Higher Farm ..	Chalk and Flint	Ley	Ley	Red Standard 2½ bushels	Oct. 14	Aug. 4		

Oats (Black).

Mr. Cousins ..	Manor Farm, Eype ..	Stone under Clay subsoil	Turnips	Veitches	Carton's Black Tartar 1 sack	Mar. 26	Aug. 11	4s	18½
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* These Exhibits gained the Champion Prize.

GENERAL REMARKS.

E.R.S. NOTES.—12th January, 1913, a remarkably mild winter so far ; a cruel spring, fine for farming and gardening though. 22nd March, 1913, a great gale from the S.W. The early part of March marked by very variable weather, gales from S.W., hail, rain, snow a little (about March 22nd at night) and also a little thunder and much sheet lightning. March 29th, sunny, mild, and fine. 29th April, heavy thunderstorm and rain over South of England.

After a cold wet spring, by the middle of May fine weather set in and resulted in a beautiful, dry, warm, fine, summer, which was quite hot in July and August, and I never remember the pastures more burnt up at the time. The hay and corn harvests were good, the hay harvest especially, but the turnips and roots generally failed, the turnips especially. Grass was never greener or more abundant in October, after the rain of September. Altogether it was a good year for farmers, and all farm stock kept up its prices.

There was a good deal of thunder and heavy rain storms in the latter part of September and the beginning of October. We have had a few frosts lately, before and on Christmas Day. The winter of 1913, to 23rd December, 1913, has been mild and dry. Sharp frosts and snow 29th December. We have had wet days, but as a rule the summer, autumn, and winter up to the end of 1913 have been hot, fine, and generally dry. A beautiful year for farmers all round, and our farmers are doing well and making money, although not one I ever heard will confess this to me.

This has been a good flowering or fruit year generally about here. Mangolds were a good crop in West Dorset, the late rain saved them. The year 1913 ended the last four days with bright, fine, seasonable weather, and ironbound in frost and snow on the ground.

J. R. NOTES.—

Average barometric reading	..	..	29.66
Highest monthly average (Dec.)	..	..	29.89

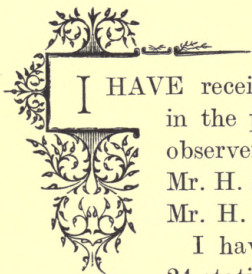
Lowest monthly average (Jan.)	..	..	29·42
Highest individual reading	..	..	33·0
(On 21st Dec. ; I have never reached as high a record before).			
Lowest individual reading	..	..	28·67
December 29th. A few snow storms.			
Thunder on Jan. 20th and March 21st only.			





Returns of Rainfall in Dorset in 1913.

By R. STEVENSON HENSHAW, C.E.



I HAVE received 66 returns this year, 4 less than in the previous year; 1 by the removal of an observer and 2 by the regretted deaths of Mr. H. Stilwell, Winterbourne Steepleton, and Mr. H. B. Vincent, Swanage.

I have calculated the averages from the 24 stations which are marked with an asterisk in the tables and which are spread as equally as possible over the whole county, although there is a large area in the centre of the county not represented by any return, and it would also be an advantage if another record were commenced in the Langton Matravers and Swanage area.

The average for the year calculated from the selected stations is 34·030 inches, whilst the average taken from the 66 returns sent in is 34·088 inches, showing that, although there are a number of gauges crowded into a small area, they are counter-balanced by those in other districts.

The average for the 58 years 1856—1913 is 33·846 inches, so that 1913 was an average year, and, as will be seen from Table 5, is represented by 100·5, against the 58 years' average of 100.

January, with an average of 6·18 inches falling on 23·6 days, was by far the wettest month, followed by the 3 autumn months, October, November, and September, in the order named.

June and July were very dry months, and if the last day in August be excepted so was that month—in most districts; at a few stations, however, heavy falls of rain were recorded on the 9th of August, particularly in the Bere Regis, Bloxworth, and East Lulworth districts.

The wettest day throughout the county generally was the 6th October, the greatest fall occurring on that day at 32 stations, whilst 15 stations record the 4th September as the wettest day, followed by the 5th September at 6 stations, and the 11th and 19th January at 4 stations each.

The greatest daily fall recorded appears to be the 2·39 inches on the 6th October at Blackdown House, Broadwindsor, when 2·10 inches were recorded at Coneygar, Bridport, and 2·00 inches at Dorchester Waterworks.

Six days with more than 1 inch of rain were recorded at 1 station, 5 such days at 2 stations, 4 days at 6 stations, 3 days at 12 stations, 2 days at 19, and 1 day only at 23 stations, whilst at 3 stations the rainfall did not reach 1 inch on any day.

The maximum number of wet days, namely—247, were recorded at Broadstone, which place held the record in 1912 with 22 more days. The observer at Blackdown House, Broadwindsor, records 214 days, whilst the minimum number of 121 was at Fleet House, Chickereil, where the minimum was also recorded in 1912.

With regard to the recording of wet days, there appears to be considerable discrepancy between stations at no great distance apart, and it is probable that this might be caused, to some extent, by the particular measuring glass in use.

It is not easy with some glasses to decide whether there is more or less than '005 ; glasses, however, are now made with a conical depression in the bottom, in which '005 can be quite accurately measured, and I would strongly recommend observers to obtain these glasses where possible, suited of course to the size of the gauge in use.

In Table 4, statistics of the temperature of the air are given as recorded by Mr. T. Pulsford, Lyme Regis, and which fill the gap which was made by the absence of the record which had been kept at Winterbourne Steepleton for so many years by the late Mr. H. Stilwell.

I very much appreciate the great improvement which has taken place in the correctness of the records which have been sent in, the number of inaccuracies being small in comparison with the year before.

OBSERVERS' NOTES.

BEAMINSTER, HAMILTON LODGE.—The average Beaminster rainfall for 40 years to end of 1912 was 38·03—the rainfall of 1913 (35·38) is 2·65 below average.

Greatest fall in 24 hours, 1·59 on 6th October. A max. shade temperature of 70° and over was reached on 43 days, as against 15 in 1912 and 87 in 1911.

The warmest day was 16th June, temp. 79°.

The highest reading of the barometer during the year was 30·67 on the 31st December.

CHEDINGTON COURT.—Our average rainfall for the 15 years ending 1912 is 37·63 on 170 days.

Total of 1913, one-hundredth part of an inch more. Very mild autumn.

CHICKERELL, "MONTEVIDEO."—Jan. 19—Thunder and lightning in afternoon and night. Mar. 21—Thunder and lightning at 4.30 a.m. and a little in afternoon. May 14—Two thunderstorms ; '40in. of rain fell in about $\frac{3}{4}$ hour ;

some lightning and thunder. Aug. 30—A little thunder a long way off in afternoon. Sep. 30—Heavy thunderstorm in afternoon towards Dorchester and Abbotsbury, but none over Chickerell, though the thunder was often loud.

A very dry summer, as is shown by the small rainfall in the following periods :—May 15th—Aug. 25—3 months and 10 days with only 1·19 in. of rain. June 8—Aug. 21—2½ months with only ·51 in. of rain. Snow on Feb. 17 and Dec. 28.

DORCHESTER, WOLLASTON HOUSE.—Except for the heavy rainfall in January there has been nothing of an exceptional nature in the year's record. The total is almost exactly in accordance with the average.

EAST LULWORTH VICARAGE.—The rainfall this year is much below the average, 12·82 ins. less than last year, and lower than any year since 1908 (28·27 ins.).

The first frost came Jan. 12th, which was also a very wet month.

June and July were unusually dry, totalling only 1·26, far less than in any year in the last ten years.

Heavy thunder occurred on Oct. 4th.

In the heavy downpour of Aug. 9—1·60 ins.—over half an inch fell in four hours.

The first frosts of any hardness began Dec. 29th.

LYME REGIS.—Several very beautiful sunsets were observed during November, notably the 28th, with crepuscular rays about 4.45 p.m.

ST. GILES' HOUSE.—Mean temperature, 50·548°; max. temperature, 84° on June 17th; min. temperature, 20° April 13th; hours of sunshine, 1,564; max. tem., 136°; highest bar. reading, 30·34 in.; lowest bar. reading, 28·80 in.

STURMINSTER MARSHALL, BAILIE HOUSE.—28th Oct., Tuesday—4 p.m., slight thunderstorm; I hardly remember

another this year. 30th Oct., Thursday—Very heavy rain between 1 and 3.30 p.m., =.58. Nov. 23rd, Sunday—1st frost, nasturtiums cut down. Dec. 29th—A very slight sprinkling of snow during Sunday night, with a cold W.N.W. wind.

WARMWELL HOUSE.—Several peals of thunder were heard on 19th Jan. A slight fall of snow occurred on 17th Feb. There was thick fog on 10th, 13th, and 14th February.

WEYMOUTH, "MASSANDRA."—The year 1913 shows a marked contrast to 1912, the rainfall being 12.07 in. less. The winter and spring were mild, the summer dry, and autumn unusually warm; with little wind and few gales.

WIMBORNE, CODFORD HOUSE.—The temperature of the year has been moderate. The lowest minimum temperature, with the exception of the night of Dec. 31st, when the temperature fell to 23°, was 25° on the 12th of January. The highest maximum was in June, when on the 16th and 29th the thermometer rose to 76°, but it did not once reach 80°.

WINTERBORNE WHITCHURCH VICARAGE.—

JAN.—A very mild month. On only one day did the temperature fail to reach 40 in the shade. On 21 days rain fell. There was a great deal of thunder and lightning from 6 to 9 p.m. on the 19th. The highest temperature was registered on the 23rd, 51°; the lowest during the night of the 12th, 21°. The coldest day was the 13th, max. 37°; warmest night, the 3rd, 45°.

FEB.—Another mild month. On four days the thermometer failed to reach 40° in the shade. The highest temperature was registered on the 12th, 52°; the lowest during the night of the 23rd, 22°. The coldest day was the 19th, 35°; the warmest night the 4th, 48°.

MARCH.—Rain fell on 15 days. On the 15th a rather heavy thunderstorm passed over from S.W. to N.E. A very severe thunderstorm, accompanied with a hail storm, the hailstones of which were of enormous size, passed over from N.W. to S.E. between 3.30 and 4 p.m. on the 21st. The highest temperature was registered on the 30th, 57° ; the lowest, the night of the 17th, 24° .

APRIL.—A wet month; rain fell on 16 days. There was a snow shower at 9 a.m. on the 12th, the only snow observed here through the year as yet. Considerable amount of thunder and lightning occurred between 5 and 6 p.m. on the 29th. Highest temperature was registered on the 23rd, 69° ; the lowest, the night of the 12th, 24° .

MAY.—The first part of this month was particularly cold and wet. There were 15 days on which rain fell. A very heavy hail storm passed over from N.W. to S.E. at 7.45 a.m. on the 19th. There was a good deal of lightning during the night of the 29th; thunder distant in the S. Warm weather prevailed during the last week. The highest temperature was registered on the 26th, 79° ; the lowest, the night of the 6th, 31° .

JUNE.—Rain fell on 6 days; there was a strong gale from S.W. to N.W. on the 9th. There was an unusual absence of thunder. The highest temperature was registered on the 26th, 81° ; the lowest on the night of the 2nd, 37° .

JULY.—Temperature reached 70° and above in shade on 15 days. Rain fell on 10 days. There was a total absence of thunderstorms. The highest temperature in shade was registered on the 28th, 80° ; the lowest, the night of the 8th, 43° .

AUGUST.—The thermometer reached 70° and above on 18 days. Rain fell on 9 days. From 5 to 7 p.m. heavy thunder was constant, far to the S. The highest temperature was registered on the 3rd, 79° ; the lowest during the night of the 5th, 38° .

SEPT.—Warm summer-like weather prevailed throughout the month, the special feature of the period being the exceptional high night temperature. Rain fell on 14 days. A heavy thunderstorm to the S.W. occurred on the 30th. The highest temperature was registered on 27th, 73° in shade; the lowest during the night of the 16th, 41° . The coldest day was the 2nd, max. 58° ; warmest night, the 4th, when the thermometer failed to fall below 60° .

OCT.—Exceptionally warm weather prevailed throughout the month. Rain fell on 16 days. The highest temperature was registered on the 3rd, 66° ; the lowest, the night of the 21st, 33° . The coldest day was the 21st, max. 50° ; the warmest night, the 19th, min. 54° .

NOV.—The temperature was high for the time of the year throughout the month, reaching the exceptional height of 61° in shade on the 26th, and 59° on the 29th. Rain fell on 18 days. Highest temperature was registered on the 26th, 61° ; the lowest during the night of the 22nd, 26° . The coldest day was the 23rd, max. 44° ; warmest night the 20th, min. 50° .

DEC.—Mild weather prevailed till the 28th, when the condition became frosty and snow fell on the 29th from 8.45 to 10.15 a.m., the first snow to lie on the ground in this neighbourhood for two years. Lightning was seen during the night of the 29th. Rain fell on 10 days. The highest temperature was registered on

the 1st, 54° in shade ; the lowest the night of the 31st, 21° . The coldest day was the 30th, max. 33° ; the warmest night the 2nd, min. 48° .

The max. and min. thermometers from which the above records were taken are Kew-corrected instruments, placed in a Stevenson screen, $4\frac{1}{2}$ feet above ground (over grass).

TABLE I.—DEPTH OF RAIN IN INCHES, 1913.

Station.	Observer.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Abbotsbury, New Barn	J. C. P. White..	5.68	1.55	2.48	2.69	2.49	.59	.52	1.32	3.44	3.36	2.54	1.72	28.38
Ashmore Rectory	Rev. A. J. Reed	6.78	1.30	3.92	3.53	3.84	.78	.77	1.75	3.82	4.86	4.18	2.72	38.25
Beaminstor, Hamilton Lodge	Fiennes Trotman	7.14	1.40	3.59	4.24	2.65	.60	.59	1.61	3.38	4.47	3.86	1.95	35.38
Beaminster Vicarage	Dorothy Hutchings	7.12	1.56	3.56	4.39	2.62	.59	.55	1.65	3.39	4.33	3.94	2.01	35.71
Bere Regis, Barrow Hill	A. Lucas	6.31	1.80	2.95	3.78	2.14	.64	.94	2.48	3.72	4.75	3.56	2.49	35.56
Bloxworth House	F. G. A. Lane	6.57	1.85	3.23	4.04	2.52	.67	1.00	3.02	3.79	4.28	4.06	2.47	37.50
" Rectory	Rev. O. Rickard-													
Bradford Peverell House	Cambridge	5.81	1.63	2.90	3.86	2.17	.63	.92	2.92	3.48	4.55	3.44	2.44	34.75
Branksome Gas Works..	Mrs. Middleton	7.46	1.73	3.69	4.20	2.80	.71	.36	1.22	4.22	4.67	4.62	2.27	38.01
Bridport, Coneygar	H. W. Woodall	5.63	1.94	2.78	3.76	2.42	.95	1.53	1.65	3.06	4.29	3.31	1.95	33.06
Broadstone	Hy. Gordon	6.40	1.06	2.58	2.75	2.64	.54	.26	1.73	4.32	5.14	3.31	1.73	32.46
Broadwindsor, Blackdown House	F. W. Beckford	6.43	1.98	3.23	4.10	2.47	.85	1.27	1.69	3.68	5.47	3.98	2.46	37.61
" Vicarage	C. E. M. Pinney	7.59	1.49	4.47	4.70	2.24	.77	.78	1.75	3.14	6.51	4.32	2.05	40.81
Buckhorn Weston	Mary J. Brown	7.50	1.70	4.78	5.11	3.29	.80	.84	1.92	3.13	5.64	4.71	2.45	41.87
Charminstor, "Brooklands"	Rev. W. Hughes D'Aeth	4.67	.97	2.45	2.94	2.21	.72	.79	1.54	3.61	3.35	3.50	2.82	29.57
Chardstock Lodge	Capt. Dymond	7.95	1.76	3.42	3.51	3.28	.52	.42	1.95	2.49	3.57	4.09	1.97	34.77
Chardstock Vicarage	Major H. Fagan	8.37	1.77	4.29	4.40	3.28	.84	.47	1.44	3.83	5.97	5.26	2.14	42.06
Charmouth, Leslie Cottage	Rev. A. Lewis	7.38	1.17	3.59	4.04	3.86	.65	.44	2.04	4.82	4.23	4.23	2.27	37.23
Chedington Court	M. E. Mills	5.88	1.00	2.89	3.40	2.18	.52	.33	1.65	4.03	4.10	3.08	1.76	30.82
Chickerell, "Montevideo"	H. Birkinshaw	7.32	1.44	3.76	4.02	2.66	.58	.81	2.03	3.86	5.26	3.89	2.01	37.64
Corfe Mullen, Poole Waterworks	Mrs. N. M. Richardson	5.23	1.56	2.44	2.43	2.46	.55	.29	1.51	3.85	3.27	2.93	1.85	28.37
Creech Grange	Waterworks Engineer	6.04	1.69	3.01	3.64	2.32	.78	1.22	1.42	3.70	4.37	4.00	2.08	34.27
Dorchester Waterworks	J. W. G. Bond	5.71	1.77	2.60	3.19	2.12	.45	.97	2.42	3.25	5.41	4.56	2.47	34.92
" Wollaston House	H. D. Strange	7.25	1.80	3.13	3.41	2.47	.68	.38	1.37	3.97	5.02	4.06	2.24	35.78
East Stoke, Binnewar Hall	Capt. J. Acland	7.33	1.77	3.22	3.34	2.38	.66	.37	1.47	3.80	4.90	4.74	2.26	36.00
Gillingham	Lieut.-Col. P. Farrer	5.93	1.72	3.04	3.64	2.15	.52	.73	1.77	3.82	4.70	3.55	2.22	34.21
Gussage St. Michael	S. H. Stephens	5.15	1.07	3.15	3.35	2.56	.77	.43	1.67	3.49	3.46	3.85	2.83	31.78
Fleet House	Mrs. Ellen Good	5.93	1.37	3.03	3.36	2.96	.65	1.25	2.43	4.15	4.76	4.82	2.33	37.04
Holme	Mrs. C. E. A. George	6.07	1.57	2.28	2.41	2.10	.37	.41	1.63	3.67	3.07	2.69	1.35	27.62
Horton Vicarage	G. D. Bond	5.80	1.68	3.16	3.63	2.32	.57	.75	2.13	3.01	4.73	3.92	2.21	33.91
Iwerne Minster	Rev. G. Wellington	5.14	1.31	2.64	2.55	2.08	.47	1.07	2.35	4.14	4.35	3.39	1.97	31.46
" "	W. Neish, for Jas.													
Kinson	Ismay, Esq.	6.65	.72	3.60	3.55	3.40	.78	.85	1.98	3.90	3.75	3.77	2.10	35.05
Leigh Vicarage	W. Chas. Keevil	6.33	1.44	3.05	4.10	2.44	.74	1.48	.67	4.49	4.67	3.51	2.08	35.25
Littlebredy Parsonage	Rev. T. L. Jenkins	6.91	1.73	3.98	3.69	2.54	.92	.58	1.37	4.09	4.52	4.77	2.46	37.56
East Lulworth Vicarage	Rev. A. C. Moule	7.04	1.66	3.16	3.49	2.85	.52	.64	1.41	4.68	3.97	3.78	1.91	35.11
West "	Rev. W. D. Filliter	5.19	1.73	2.51	3.07	2.40	.50	.76	2.93	2.85	4.47	3.68	2.42	32.51
" "	Rev. W. Percy Schuster	4.86	1.57	2.57	2.57	2.10	.38	.67	1.49	2.91	3.83	2.92	2.01	27.88
Lyme Regis	Tom G. Pulsford	6.35	.90	2.63	3.14	2.34	.43	.22	1.57	3.95	4.21	3.45	1.73	30.92

TABLE I. (CONTINUED).

Station.	Observer.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Melbury House Gardens	R. Dintoul ..	6.90	1.70	3.90	4.18	2.26	'81	'68	2.13	3.60	4.74	4.77	2.11	37.78
Milton Abbey Gardens	C. H. Perkins ..	7.57	1.86	3.72	4.24	2.96	'98	1.35	2.95	3.93	4.50	4.82	2.19	41.16
Parkstone	W. H. Symes ..	5.68	1.75	2.98	3.83	2.48	'92	1.49	1.86	2.93	4.23	3.14	1.79	33.08
Portland, H.M. Nav. Dep't	Officer in charge of Works	5.39	1.62	3.03	2.47	2.25	'43	'56	1.41	3.11	3.78	3.74	2.18	29.97
" Easton	R. Stevenson Henshaw, C.E.	5.11	1.73	2.59	2.45	1.92	'41	'45	1.46	3.04	3.52	2.94	2.26	27.88
Puddletown Vicarage	Rev. A. Helps ..	6.69	1.89	3.30	3.81	2.37	'61	'70	2.22	3.74	4.44	4.22	2.32	36.31
Ranston ..	Sir R. L. Baker, Bart., M.P.	6.47	'98	3.23	3.34	2.84	'71	'26	2.47	3.53	3.32	3.33	2.05	32.73
St. Giles' House ..	E. Axford, for Earl of Shaftesbury	6.16	1.51	2.76	3.50	2.84	'49	'08	2.20	4.03	4.84	4.33	2.28	36.02
Shaftesbury	Rev. F. Elhvers ..	4.31	'79	2.77	2.61	2.45	'92	'61	1.82	3.49	3.16	3.11	2.32	28.36
Sherborne Castle	Thos. Turton ..	5.51	1.18	2.86	3.31	2.57	'77	'71	2.18	3.84	4.71	3.28	2.53	33.45
Sturminster Marshall	Rev. Jas. Cross ..	5.72	1.47	3.04	3.70	2.27	'38	'64	1.49	3.61	4.40	3.93	2.11	34.26
Newton	A. R. Hallett ..	6.02	1.13	3.06	2.89	2.77	'60	'46	1.75	3.37	3.41	3.16	2.13	31.75
" Vicarage ..	Rev. Canon J. C. M. Mansel-Pleydell	5.97	1.14	3.12	3.02	2.92	'64	'47	1.13	3.03	3.54	3.81	2.34	32.13
Trigon	Mrs. Leonard Sturdy ..	5.72	1.08	2.83	3.63	2.14	'34	'80	2.01	2.43	4.55	2.97	2.12	31.22
Upwey, Portland Waterworks	R. Stevenson Henshaw, C.E.	6.11	1.45	2.47	2.83	2.66	'63	'35	1.48	3.91	3.84	3.12	2.20	31.05
Wareham	S. W. Bennett ..	5.99	1.74	3.03	3.47	2.16	'60	'92	1.35	3.27	5.07	4.12	2.09	34.41
" King's Barrow	L. G. Pike ..	5.55	1.73	2.98	3.41	1.97	'56	'80	1.94	2.86	4.68	4.08	2.09	32.65
" Worgret Hill	W. Sargent ..	5.50	1.69	2.72	3.27	2.59	'34	'84	2.09	3.00	4.75	3.45	2.12	32.36
Warmwell House	Lord Wynford	6.34	1.46	3.16	3.19	2.34	'57	'79	1.34	3.22	4.34	4.52	2.38	34.15
Weymouth	J. H. Bolam, M.I.E.E.	4.72	1.46	2.22	2.05	2.06	'56	'23	1.66	3.03	3.02	3.20	1.85	26.06
" "Massandra"	H. W. Green ..	5.59	1.61	2.67	2.37	2.47	'58	'23	1.91	2.97	2.89	3.59	1.90	28.48
Wimborne, Codford House	G. H. Batterbury, M.D.	5.61	1.63	3.04	3.78	2.55	'68	'19	1.46	3.90	4.87	3.85	2.18	34.74
" Royston	E. H. Widdell ..	5.83	1.66	3.22	3.67	2.45	'70	'21	1.56	3.99	4.89	4.13	2.32	35.63
" Stonelam	H. J. Tuck ..	5.77	1.49	2.56	3.49	2.56	'56	'08	1.42	3.82	4.82	3.44	2.05	33.06
" Westfield	Gertrude, Countess of Moray	5.87	1.05	3.10	3.80	2.62	'64	'41	1.49	3.93	4.78	3.62	2.16	34.87
Winterbourne Whitechurch	Rev. H. H. T. Bassett	6.49	1.61	2.98	3.63	3.05	'00	'34	2.46	3.93	4.13	4.22	2.80	37.64
" Vicarage	Miss H. G. Williams ..	7.25	1.81	3.04	3.35	2.70	'77	'44	1.42	3.85	4.64	4.13	2.28	35.68
Herrington	Alice L. Homer ..	6.24	1.27	2.90	3.27	2.73	'41	'45	2.15	4.17	4.79	4.11	2.09	35.58
Witchampton	F. M. Walter ..	7.35	1.61	3.97	3.56	3.46	'35	'44	1.51	3.76	4.47	4.17	2.22	36.87
Wynford Eagle ..														

* The averages have been calculated from the Stations marked with an asterisk.

TABLE II.—RAINFALL IN 1913.

Stations.	Greatest fall in 24 hours.		Days with 1 in. or more.	Number of Days on which .01 in. or more was recorded.												Year.
	Depth.	Date.		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Abbotsbury, New Barn	In.	6 Oct.	2	24	14	19	22	17	12	7	8	10	23	20	16	192
Asmore Rectory	1.30	4 Sept.	3	23	12	20	19	16	8	6	11	16	20	22	14	187
Beaminster, Hamilton Lodge	1.58	6 Oct.	3	26	13	23	22	15	11	8	11	15	18	17	17	196
Beaminster Vicarage	1.59	6 "	2	25	14	23	22	16	11	6	10	15	17	17	17	193
Bere Regis, Barrow Hill	1.35	6 "	4	24	12	17	18	15	9	8	8	12	14	16	12	161
Bloxworth House	1.65	9 Aug.	2	26	15	18	18	16	7	7	10	12	16	19	8	176
Bloxworth Rectory	1.67	9 Aug.	3	20	10	18	16	13	6	5	7	10	15	18	15	146
Bradford Peverell House	1.83	6 Oct.	2	25	11	20	18	16	10	7	6	12	21	18	8	179
Branksome, Gas Works	1.03	11 Jan.	1	22	14	21	16	13	7	9	5	10	20	17	8	162
Bridport, Coneygar	2.10	6 Oct.	2	22	10	19	19	18	10	5	10	13	17	19	10	172
Broadstone	1.03	11 Jan.	2	26	20	24	22	19	14	16	16	21	26	28	15	247
Broadwindsor, Blackdown House	2.39	6 Oct.	4	27	16	25	21	17	12	8	13	16	21	18	20	214
Broadwindsor Vicarage	1.75	6 "	3	26	14	23	19	17	12	7	11	13	20	20	16	198
Buckhorn Weston	1.54	4 Sept.	1	23	13	22	17	15	9	10	10	10	17	23	14	183
Charmminster, "Brooklands"	1.58	19 Jan.	2	24	11	20	17	16	6	8	6	10	17	17	12	164
Cattistock Lodge	1.79	6 Oct.	6	26	15	23	19	16	8	10	9	12	21	21	15	195
Chardstock Vicarage	1.37	4 Jan.	3	28	10	22	18	17	12	7	13	16	21	20	17	109
Charmouth	1.25	5 Sept.	1	22	11	20	18	20	13	9	11	11	18	18	14	185
Chedington Court	1.64	4 Jan.	4	25	12	21	20	13	9	11	10	14	18	16	12	181
Chickerell, "Montevideo"	1.18	5 Sept.	2	27	14	22	18	17	9	5	9	12	21	21	13	188
Corfe Mullen	.97	4 Sept.	0	19	7	14	13	13	3	5	3	9	12	17	6	121
Creech Grange	1.17	6 Oct.	3	22	9	16	14	13	5	6	6	11	18	16	11	147
Dorchester Waterworks	2.00	6 "	2	25	11	20	20	14	10	6	8	12	20	18	14	178
Dorchester, Wollaston House	1.81	6 "	2	24	10	22	20	15	7	7	7	12	20	19	14	179
East Stoke, Binnegar Hall	1.05	6 "	2	23	12	21	16	14	8	7	10	14	20	19	15	179
Gillingham	1.39	4 Sept.	1	22	13	23	17	14	9	8	11	14	18	19	16	184
Gussage St. Michael	1.53	4 "	3	23	11	18	15	13	8	7	6	12	15	17	11	156
Fleet House	1.19	5 "	3	23	9	12	12	9	5	3	8	8	13	12	7	121
Holme	1.03	6 Oct.	1	20	10	19	15	15	6	9	9	11	19	17	12	162
Horton Vicarage	(?)	4 Sept.	1	23	15	22	19	14	9	11	7	12	20	21	15	188
Iwerne Minster	1.32	4 "	5	25	12	22	17	15	10	8	8	13	16	20	14	180
Kinson	1.19	11 Jan.	1	25	15	19	21	15	11	11	8	15	19	25	15	199
Leigh Vicarage	1.62	6 Oct.	3	25	12	19	18	13	7	8	8	13	19	16	10	168

* The averages have been calculated from the Stations marked with an asterisk.

TABLE II.—(CONTINUED).

Stations.	Greatest fall in 24 hours		Days with in. or more.	Number of Days on which '01in. or more was recorded.												Year.		
	Depth.	Date.		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.			
				In.														
Littlebrey Parsonage ..	1.36	6 Oct.	2	22	9	20	16	13	6	6	6	7	10	17	17	12	155	
East Lulworth Vicarage ..	1.60	9 Aug.	1	21	9	21	19	13	6	6	6	7	8	18	17	9	156	
West Lulworth Vicarage ..	1.15	6 Oct.	1	21	9	19	17	15	5	5	6	7	8	17	18	14	159	
Lyme Regis ..	1.27	5 Sept.	1	22	8	19	15	16	8	8	6	8	9	16	16	12	157	
Melbury House Gardens ..	1.41	6 Oct.	4	23	10	23	18	11	7	7	6	9	13	15	18	11	167	
Milton Abbey Gardens ..	1.72	6 "	4	25	13	20	19	12	8	11	8	8	15	21	21	17	190	
Parkstone ..	1.09	11 Jan.	1	23	13	21	18	12	10	9	8	8	11	20	17	10	172	
Portland, Breakwater ..	1.26	6 Oct.	1	25	12	20	19	14	9	5	5	8	10	17	19	12	170	
Portland, Easton ..	1.33	6 "	1	26	13	18	19	13	12	9	6	7	10	19	20	12	175	
Puddletown Vicarage ..	1.72	6 "	3	25	11	17	19	16	9	8	10	13	17	20	10	175		
Ranston ..	1.36	19 Jan.	5	24	12	19	17	13	9	9	7	6	12	10	12	9	126?	
St. Giles' House ..	1.58	4 Sept.	4	23	7	11	15	12	7	2	2	6	7	12	17	19	15	173
Shaftesbury ..	1.19	4 "	1	23	12	20	16	13	12	10	10	10	13	16	20	14	179	
Sherborne Castle ..	1.50	6 Oct.	1	26	13	21	19	20	12	10	10	13	20	21	17	20	171	
Sturminster Marshall ..	1.20	4 Sept.	1	22	13	20	18	14	7	10	6	12	19	17	13	17	171	
Sturminster Newton ..	1.01	19 Jan.	2	22	11	15	19	16	7	7	7	8	10	14	17	10	156	
Sturminster Newton Vicarage	1.09	19 "	2	23	11	18	17	17	7	7	7	9	10	17	17	13	166	
Trigon ..	1.03	6 Oct.	1	26	14	17	16	13	4	8	8	8	8	19	19	14	166	
Upwey, Portland Water Works	1.32	6 "	2	24	16	19	20	14	11	9	8	8	12	21	20	16	190	
Wareham ..	1.27	6 "	3	24	15	19	15	13	8	7	7	8	10	16	16	15	179	
Wareham, King's Barrow ..	1.20	6 "	1	19	9	19	15	12	7	7	8	10	16	16	16	8	146	
Wareham, Worret Hill ..	1.08	6 "	0	29	17	19	17	17	4	9	9	6	12	18	23	16	204	
Warmwell House ..	1.62	6 "	1	26	14	18	18	15	7	9	7	8	9	16	19	15	178	
Weymouth ..	1.10	5 Sept.	2	23	10	17	17	15	8	7	8	9	11	17	19	14	173	
Weymouth, "Massandra" ..	.95	5 "	0	25	12	17	19	15	10	12	11	15	22	21	19	14	173	
Wimborne, Godford House ..	1.17	4 "	1	24	12	19	18	13	7	10	8	8	15	22	21	17	207	
Wimborne, Royston ..	1.12	4 "	1	22	12	19	17	10	8	8	8	12	19	22	20	20	158	
Wimborne, Stonelash ..	1.22	4 "	1	20	11	15	14	8	3	13	5	11	13	10	10	6	138	
Wimborne, Westfield ..	1.24	4 "	1	17	11	15	14	15	6	10	5	11	13	10	10	6	126?	
Winterbourne Whitchurch Vicarage	1.27	6 Oct.	1	21	9	16	16	15	6	10	6	9	14	16	18	10	160	
Winterbourne Whitchurch Vicarage	1.65	6 Oct.	3	22	10	18	18	12	8	7	6	6	9	16	16	13	153	
Witchampton ..	1.91	4 Sept.	2	22	10	17	14	10	7	8	6	10	15	17	11	17	147	
Wynford Eagle ..	1.65	6 Oct.	2	23	15	19	19	16	11	7	9	9	15	15	21	17	187	

* The averages have been calculated from the Stations marked with an asterisk.

TABLE III.—AVERAGE MONTHLY RAINFALL.

	1913.				58 years, 1856-1913.		
	Average of 24 Stations marked *	Proportionate fall (a). Difference from 58 years' average (b).		Days of 0.1 in. or more.		Proportionate fall (c). Do. corrected for inequality of days (d).	
		(a)	(b)			(c)	(d)
January ..	6.18	182 + 85		23.6	In. 3.29	97	95.3
February ..	1.45	43 - 31		12.0	2.50	74	79.8
March ..	3.07	90 + 18		19.9	2.44	72	70.7
April ..	3.38	99 + 33.5		17.9	2.22	65.5	66.5
May ..	2.65	78 + 19		14.8	1.99	59	58.0
June ..	.65	19 - 46.5		8.7	2.22	65.5	66.5
July ..	.76	22 - 45		8.0	2.26	67	65.8
August ..	1.88	55 - 26		8.8	2.75	81	79.6
September ..	3.67	108 + 23		12.0	2.88	85	86.3
October ..	4.31	127 + 4		18.2	4.15	123	120.9
November ..	3.82	112 + 10		19.0	3.44	102	103.5
December ..	2.21	65 - 44		13.2	3.70	109	107.1
Year ..	34.030	1,000		176.1	33.846	1,000	1,000

TABLE IV.—STATISTICS OF THE TEMPERATURE OF THE AIR, AND OF THE HUMIDITY, AT LYME REGIS AT 9 A.M. KEPT BY MR. T. G. PULSFORD,

1913.	Temperature of the Air.											Relative Humidity.	Tension of Vapour.
	In Stevenson's Screen. 55ft. above O.D.												
	Means.							Extremes.					
	9 a.m.			Minimum.	Maximum.	Range.	Means.	Minimum.	Date.	Maximum.	Date.		
	Dry Bulb.	Wet Bulb.	Dew Point										
	°	°	°	°	°	°	°	°		°			
Jan.	44.7	42.6	40.3	39.3	49.6	10.3	44.4	29.4	14	56.0	23	83	.250
Feb.	44.4	41.7	38.2	38.8	48.7	9.9	43.7	29.5	19	58.0	(12) 14	79	.231
Mar.	48.7	46.5	44.3	39.6	53.8	14.2	46.2	28.8	18	61.5	30	84	.292
Apr.	49.8	46.7	43.5	42.4	54.9	12.5	48.6	33.5	8	69.6	23	79	.283
May	54.7	51.9	49.	46.8	61.1	14.3	53.9	37.	2	75.	26	81	.348
Jun.	59.9	55.3	50.8	50.6	66.5	15.9	58.5	42.4	1	77.6	16	73	.371
July	63.9	55.6	49.	55.3	69.9	14.6	62.6	49.	7	78.5	23	58	.348
Aug.	64.5	59.2	55.1	54.4	72.3	17.9	63.3	46.5	7	78.9	14	70	.434
Sep.	60.0	55.2	50.8	54.1	66.6	12.5	60.3	47.2	17	74.3	27	72	.371
Oct.	56.6	53.5	50.7	52.3	62.0	9.7	57.1	41.5	24	68.2	3	80	.370
Nov.	51.1	49.1	47.0	43.3	57.2	13.9	51.2	32.9	23	61.4	6	86	.323
Dec.	43.5	41.7	39.3	38.9	49.4	10.5	44.1	27.5	31	60.5	1	86	.240
	53.5	49.9	46.5	46.3	59.3	13.0	52.8	37.1		68.3		77	.321

TABLE V.—FLUCTUATION OF ANNUAL RAINFALL.

58 years' average = 100.

Year	Ratio.
1898	79
1899	88
1900	103·5
1901	89
1902	87·5
1903	126·5
1904	102
1905	79·5
1906	100
1907	98
1908	81·5
1909	110
1910	117
1911	92·5
1912	132
1913	100·5



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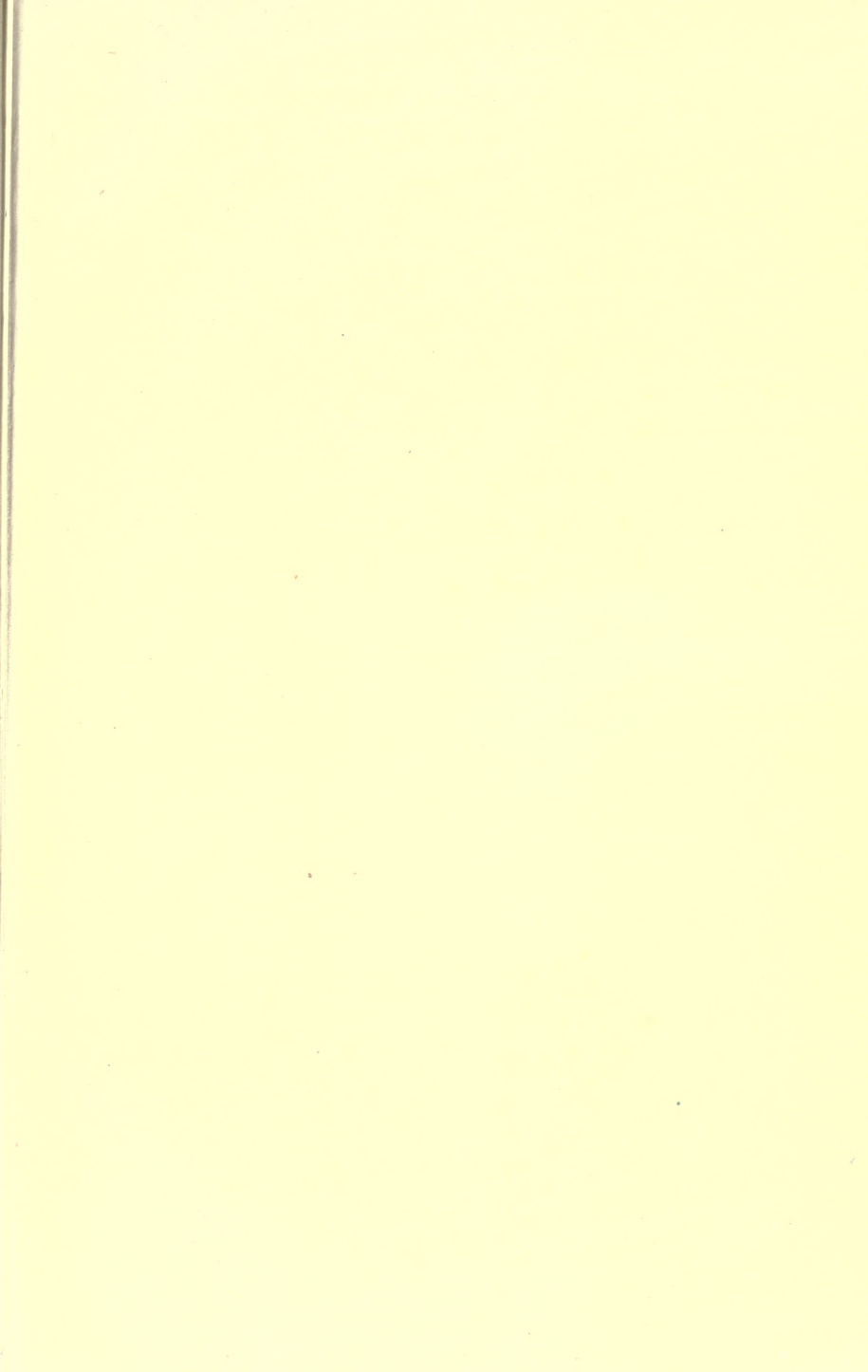
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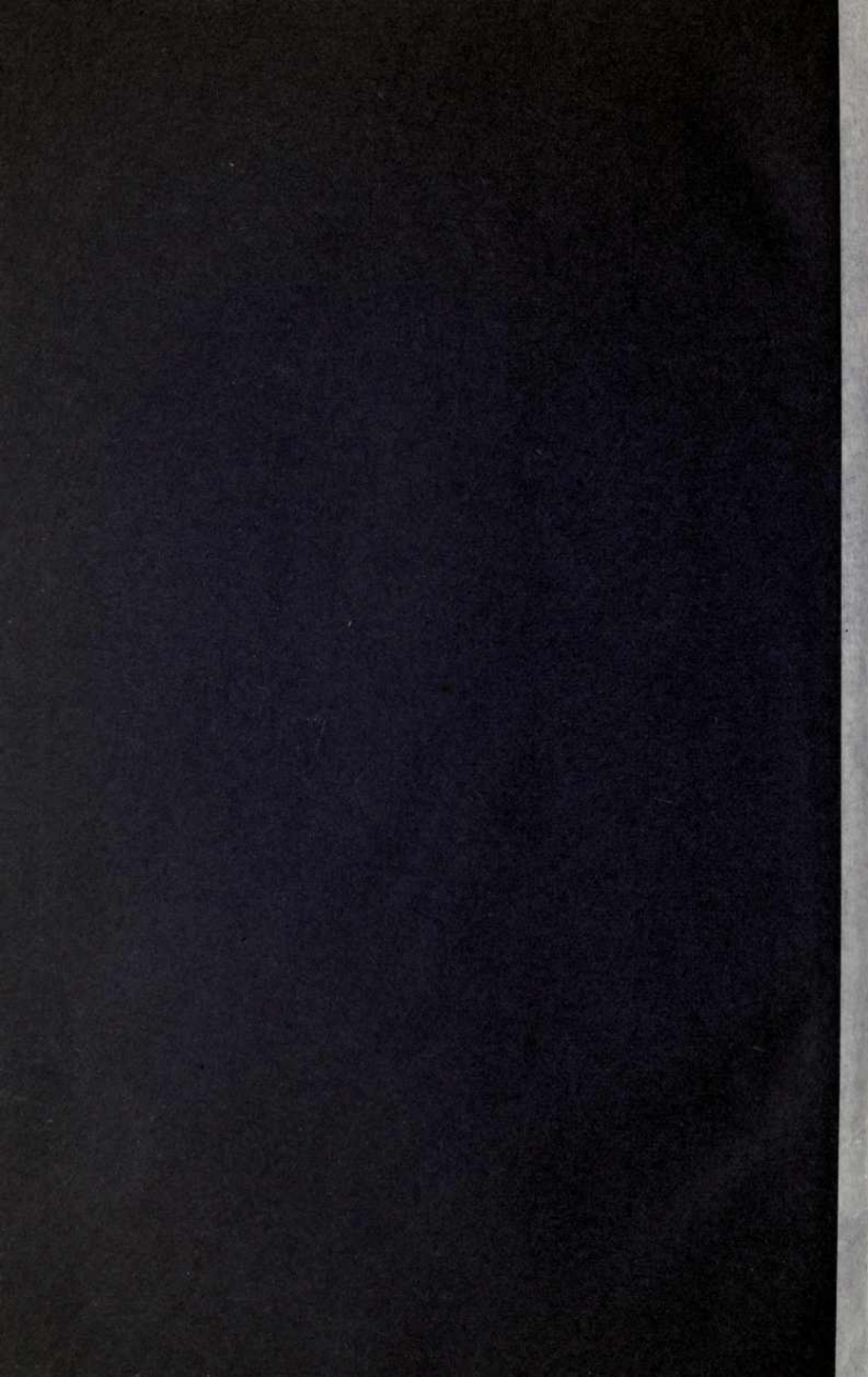
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